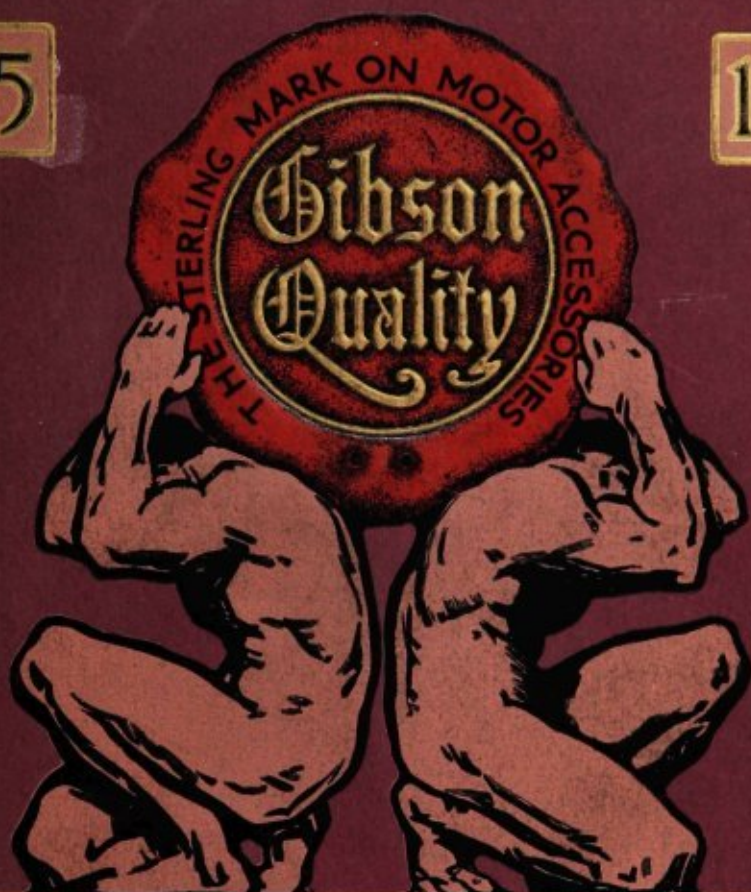


1915

1915



MOTOR CAR
ACCESSORIES

THE GIBSON COMPANY
INDIANAPOLIS





Discount Sheet



Applying to the 1915 Catalogue

OF

THE GIBSON COMPANY, Indianapolis

All prices in this Catalogue PRECEDED BY THE LETTERS D.P. are subject to a discount of

50% and 10%

except in the case of very few pages, which we list below, and which take special discounts. These pages are easily located as the following words appear at the bottom of each one: **Special Discount Applies to this Page.**

For the convenience of our Dealers we have shown a retail price on the articles in this catalogue. This price is shown in heavy black face type, thus (\$12.00), and is the price at which we should sell these accessories. The Retail Price must not be used when figuring your account. Always be sure to figure discounts from those prices having the letters D.P. in front of them.

Pages on which Special Discounts Apply

PAGE		DISCOUNT
40	Schebler Carburetor Parts - - - - -	25 per cent.
41	Schebler Carburetor Parts - - - - -	25 per cent.
61	Automobile Fuses, from 1A to 5A inclusive - - - - -	50 per cent.
	6A - - - - -	40 per cent.
72	Falcon Casings, Plain Tread - - - - -	15 and 10 per cent.
73	Falcon Casings, Non-Skid Tread - - - - -	15 and 10 per cent.
74	Falcon Tubes, Gray - - - - -	15 and 10 per cent.
75	Falcon Tubes, Red - - - - -	15 and 10 per cent.
94	Stanweld Rims and Parts - - - - -	20 per cent.
95	Stanweld Rims and Parts - - - - -	20 per cent.
107	Klaxon Horns, Single Lots - - - - -	25 per cent.
	Dozen Lots - - - - -	30 per cent.
	Lots of Fifty - - - - -	35 per cent.
163	Gibson Quality Seat Covers - - - - -	33 1/2 per cent.
168	Weed Chains, Single Lots - - - - -	25 per cent.
	Dozen Lots (pairs) - - - - -	33 1/2 per cent.
169	Weed Chains for Solid Tires, Single Lots - - - - -	25 per cent.
	Dozen Lots (pairs) - - - - -	33 1/2 per cent.
174	Vulcan Springs - - - - -	50 per cent.
175	Vulcan Springs - - - - -	50 per cent.
176	Vulcan Springs - - - - -	50 per cent.
182	Fafnir Ball Bearings, Single Lots - - - - -	40 per cent.
	Dozen Lots - - - - -	50 per cent.

NOTE—Falcon Tires and Tubes and Klaxon Horns are subject to a cash discount of five per cent. All other prices are subject to the regular cash discount of 2 per cent., unless specified in the catalogue that the prices are net.

A simple formula for figuring the net dealer's price on a discount of fifty and ten per cent. is as follows:

If the list price is D.P. \$12.22—

Divide the amount by two - - - - - thus: 2) \$12.22

6.11

Then take ten per cent. off the result—thus: .61

Which makes the net price - - - - - \$5.50

We believe you will find our prices as low (quality and service considered) as those of any immediate manufacturer, jobber or distributor. We know that our stock is the most up to date in this line, and that it will pay you to send your orders to this House. Every consideration will be given your requirements, and should the prices shown in this catalogue be changed you will receive the benefit of such change.

THE GIBSON COMPANY, Indianapolis

"WE SERVE THE DEALER ONLY"

Discount Sheet

Applying to this Catalogue

THE GIBSON COMPANY, Indianapolis

30 and 10

Pages on which Special Discounts Apply

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

THE GIBSON COMPANY, Indianapolis

CARNEGIE LIBRARY
PITTSBURGH, PA.



Trade Mark Registered U. S. Patent Office



FOR YOUR INFORMATION

- ¶ With fifteen years' experience in the distribution of *Motor Car Accessories*, and the annual publication of a catalogue describing this line, we feel justified in claiming that this, our 1915 edition, is the most complete work of its kind ever published.
- ¶ We have directed our efforts toward the simplification of the line by cataloging only those articles that have earned a reputation through long service and efficient performance. We do not carry obsolete or untried articles, and before offering any device or accessory it must have the approval of our Engineering and Research Departments, in whose laboratory every accessory and unit of equipment is thoroughly analyzed and tested.
- ¶ This department is conducted for the benefit of our dealers to avoid their purchasing materials and specialties which might prove troublesome or unsalable.
- ¶ This catalogue will prove a guide to every dealer in the selection of his stock and shop equipment. It represents the best obtainable in all the markets of the world. It contains a line of information valuable alike to the Dealer, Engineer or Mechanic in the automobile field.
- ¶ Your attention is directed to the line of "GIBSON QUALITY" specialties. Every item carrying this brand is manufactured under our supervision and over our specifications. They are the highest grade in material, workmanship and construction, and superior to anything manufactured for that particular purpose or service. They carry a guarantee that is positive insurance to the Dealer—"Satisfaction or No Sale."
- ¶ We have established our reputation by maintaining a "single outlet" policy. We cater to the legitimate Automobile Dealer or Garage Operator exclusively. We protect this policy jealously—should our literature fall into the hands of the illegitimate "cut-rate" concern or the consumer, he has obtained it by misrepresentation, and we will appreciate your notifying us of such cases.
- ¶ Our constant aim is to give "Service," "Quality," and "Fair Treatment." These elements are the fundamentals of every business. Our remarkable growth is directly traceable to this policy. In a word, we co-operate with and conserve the interests of *all* our dealers.
- ¶ This Company has an organization trained in this line. It is officered by men of wide experience, sound business judgment, and unlimited means. This is of exceptional benefit to the dealer who is assured that his transactions will be handled in a prompt, equitable, and satisfactory manner. It also means relations with a house that is established on a sound basis and a permanent institution. Any bank, trust company, or commercial agency will inform you as to our responsibility.
- ¶ While we cover the entire United States with trained Salesmen, there are certain points that we can not reach advantageously. From those points we invite the trade to send their orders by mail. They will receive the same careful attention, quick shipment, and you will get the same price advantage as though the order had been taken by one of our representatives. You can feel perfectly safe in sending your mail orders to "GIBSON." If our salesman does not visit you, we will be pleased to have you advise us, and a representative will call.
- ¶ There may be certain articles you need, not shown in this catalogue. If so, do not hesitate to send us your order; if the item can be had, we will obtain it for you.
- ¶ Finally—we solicit your consideration—your business—we assure you a class of "service" and "treatment" that will justify your confidence.

THE GIBSON COMPANY
INDIANAPOLIS



GIBSON QUALITY



FOUNDED 1900
FIFTEEN YEARS' EXPERIENCE AT YOUR "SERVICE"

1915
CATALOGUE

Motor Car
Accessories and Tires

SHOP EQUIPMENT AND
ELECTRICAL SUPPLIES



THE GIBSON COMPANY

(Formerly Gibson Automobile Company)

416-424 NORTH CAPITOL BOULEVARD
INDIANAPOLIS

Available Resources, \$7,000,000.00

We Serve the Dealer Only



THE GIBSON COMPANY

INDIANAPOLIS



EXTENSION OF GIBSON QUALITY SERVICE

On account of the *great* reduction recently, in express rates by the various express companies, together with the lower rates on parcel post and the increase in the weight limit, *Gibson Quality Service* can now be obtained by all dealers, regardless of your location and at practically the same rates as if ordered from your neighboring jobber.

With these facilities at your command, dealers a thousand miles away can draw on our *unlimited stock* with the confidence that your orders will be filled promptly and properly and goods received with quick dispatch. INDIANAPOLIS, SITUATED PRACTICALLY IN THE CENTER OF THE UNITED STATES, MAKES AN IDEAL DISTRIBUTING POINT, AND IT ALSO BEING ONE OF THE LEADING RAILWAY CENTERS OF THE COUNTRY, GIVES YOU AN ADDED ADVANTAGE FOR RATES AND QUICK TRANSPORTATION.

We give below, rates to various points from Indianapolis. In some cases parcel post rates are lower than express rates, in which event we take the lower rate. We always use our best judgment in making shipments.

Minimum Rates on Shipments Up to Twenty Pounds

FROM INDIANAPOLIS TO					FROM INDIANAPOLIS TO					FROM INDIANAPOLIS TO				
5	10	15	20		5	10	15	20		5	10	15	20	
Lbs.	Lbs.	Lbs.	Lbs.		Lbs.	Lbs.	Lbs.	Lbs.		Lbs.	Lbs.	Lbs.	Lbs.	
ALABAMA—					IOWA—(Continued.)					NORTH DAKOTA—				
Aniston	*23	*43	51	62	Pt. Dodge	*23	40	51	61	Fargo	*32	49	63	78
Birmingham	*23	40	50	60	Ottumwa	*14	*24	*34	*44	OHIO—				
Mobile	*32	45	58	71	Sioux City	*23	*43	60	73	Akron	*14	*24	*34	44
Montgomery	*23	43	54	66	Waterloo	*23	37	45	54	Bellefontaine	*09	*14	*19	*24
Selma	*23	43	54	66	KANSAS—					Cincinnati	*09	*14	*19	*24
ARIZONA—					Atchison	*23	40	51	61	Columbus	*14	*24	34	39
Phoenix	*51	96	135	173	Oberlin	*32	54	71	88	Canton	*14	*24	*34	44
Prescott	*51	93	129	166	Topeka	*23	40	51	61	Dayton	*09	*14	*19	*24
ARKANSAS—					Wichita	*23	*43	63	77	Freemont	*14	*24	34	39
Ft. Smith	*23	*43	60	73	KENTUCKY—					Lima	*09	*14	*19	*24
Little Rock	*23	42	54	65	Bowling Green	*14	*24	34	39	Marietta	*14	*24	*34	41
Pine Bluff	*23	42	54	65	Frankfort	*09	*14	*19	*24	Portsmouth	*14	*24	*34	44
CALIFORNIA—					Henderson	*09	*14	*19	*24	Springfield	*09	*14	*19	*24
Los Angeles	*51	*101	150	194	Louisville	*09	*14	*19	*24	St. Marys	*09	*14	*19	*24
COLORADO—					Lexington	*09	*14	*19	*24	Toledo	*14	*24	34	39
Denver	*32	60	80	100	Owensboro	*09	*14	*19	*24	Youngstown	*14	*24	*34	44
CONNECTICUT—					Paducah	*14	*24	34	39	Zanesville	*14	*24	*34	41
Hartford	31	42	53	64	LOUISIANA—					OKLAHOMA—				
DELAWARE—					Baton Rouge	*23	*43	62	76	Guthrie	*32	50	66	81
Dover	*23	39	48	58	New Orleans	*32	48	62	76	Oklahoma City	*32	50	66	81
DIST. COLUMBIA—					Shreveport	*32	49	63	78	Muskogee	*23	*43	60	74
Washington	*23	38	47	56	MAINE—					Tulsa	*23	*43	58	71
FLORIDA—					Augusta	*32	46	60	73	OREGON—				
Jacksonville	*32	51	66	82	MARYLAND—					Portland	*60	109	153	198
Key West	*41	66	89	112	Baltimore	*23	38	47	56	PENNSYLVANIA—				
Pensacola	*32	47	60	74	MASSACHUSETTS—					Philadelphia	*23	39	48	58
Tampa	*32	55	72	90	Boston	31	42	54	65	Pittsburgh	*23	39	48	58
GEORGIA—					MICHIGAN—					RHODE ISLAND—				
Atlanta	*23	42	53	64	Adrian	*14	*24	34	39	Providence	31	43	54	66
Columbus	*23	*43	57	70	Benton Harbor	*14	*24	34	39	S. CAROLINA—				
Macon	*23	*43	58	71	Battle Creek	*14	*24	*34	41	Columbia	*23	*43	59	72
Rome	*23	38	48	57	Cold Water	*09	*14	*19	*24	Charleston	*23	*43	*63	80
Savannah	*23	*43	62	76	Detroit	*14	*24	*34	41	Spartanburg	*23	*43	*57	69
IDAHO—					Grand Rapids	*14	*24	*34	41	SOUTH DAKOTA—				
Boise	*51	97	135	174	Kalamazoo	*14	*24	*34	41	Sioux Falls	*23	*43	57	69
INDIANA—					Niles	*09	*14	*19	*24	TENNESSEE—				
Anderson	*09	*14	*19	*24	St. Joseph	*14	*24	34	39	Chatanooga	*14	*24	*34	*44
Bloomington	*09	*14	*19	*24	MINNESOTA—					Knoxville	*14	*24	*34	*44
Connersville	*09	*14	*19	*24	Minneapolis	*23	41	52	63	Memphis	*23	37	45	51
Columbus	*09	*14	*19	*24	MISSISSIPPI—					Nashville	*14	*24	*34	44
Elkhart	*09	*14	*19	*24	Gulfport	*32	45	58	71	TEXAS—				
Evansville	*09	*14	*19	*24	Jackson	*23	43	54	66	Austin	*22	60	80	100
Frankfort	*09	*14	*19	*24	Meridian	*23	43	54	66	Dallas	*32	54	71	88
FT. Wayne	*09	*14	*19	*24	Natchez	*23	*43	*59	72	El Paso	*41	77	105	134
Kokomo	*09	*14	*19	*24	Vicksburg	*23	43	54	66	Fl. Worth	*32	56	74	92
Lafayette	*09	*14	*19	*24	MISSOURI—					Galveston	*32	57	75	94
Legansport	*09	*14	*19	*24	Jefferson City	*23	36	44	52	San Antonio	*32	*62	86	108
Muncie	*09	*14	*19	*24	Kansas City	*23	39	48	58	UTAH—				
Mt. Vernon	*09	*14	*19	*24	St. Louis	*14	*24	*34	41	Salt Lake City	*41	*81	116	148
Richmond	*09	*14	*19	*24	St. Joseph	*23	39	48	58	VERMONT—				
South Bend	*09	*14	*19	*24	MONTANA—					Burlington	31	42	53	64
Terre Haute	*09	*14	*19	*24	Butte	*41	*81	120	153	VIRGINIA—				
Vincennes	*09	*14	*19	*24	NEBRASKA—					Lynchburg	*23	39	49	59
ILLINOIS—					Lincoln	*23	42	54	65	Norfolk	*23	*43	57	69
Bloomington	*09	*14	*19	*24	Omaha	*23	41	52	63	Richmond	*23	42	53	64
Calo	*14	*24	34	41	NEVADA—					WASHINGTON—				
Champaign	*09	*14	*19	*24	Reno	*51	*101	147	190	Seattle	*60	108	152	196
Charleston	*09	*14	*19	*24	NEW HAMPSHIRE—					W. VIRGINIA—				
Chicago	*09	*14	*19	*24	Berlin	32	43	55	67	Charleston	*14	*24	*34	*44
Clinton	*09	*14	*19	*24	NEW JERSEY—					Huntington	*14	*24	*34	*44
Decatur	*09	*14	*19	*24	Newark	30	40	51	61	Martinsburg	*23	37	45	54
Danville	*09	*14	*19	*24	NEW MEXICO—					Wheeling	*14	*24	*34	*44
Joliet	*14	*24	34	39	Santa Fe	*41	66	90	113	WISCONSIN—				
Moline	*14	*24	*34	41	NEW YORK—					Madison	*14	*24	*34	44
Peoria	*14	*24	34	39	Buffalo	*23	35	42	50	Milwaukee	*14	*24	*34	44
Paris	*09	*14	*19	*24	New York	30	41	51	62	Racine	*14	*24	34	39
Quincy	*09	*14	*19	*24	N. CAROLINA—					WYOMING—				
Rock Island	*14	*24	*34	41	Asheville	*23	41	52	63	Cheyenne	*32	61	81	102
Springfield	*14	*24	32	36	Charlotte	*23	43	54	66					
IOWA—					Raleigh	*23	*43	58	71					
Burlington	*14	*24	*34	41	Wilmington	*23	*43	61	75					
Cedar Falls	*23	37	45	51										
Davenport	*14	*24	*34	41										
Des Moines	*23	38	47	56										

*Denotes parcel post rates. Other amounts, express rates.



Trade Mark Registered U. S. Patent Office



Trade Mark Registered U. S. Patent Office

WHY "GIBSON QUALITY" SERVICE EXCELS—
INDIANAPOLIS IS THE "HEART OF TRADE"



THE "GIBSON" POLICY

Quality Goods Immediate Shipment Fair Treatment

Instructions for Ordering

DESCRIPTION OF ARTICLES

Write your order plainly, describe goods wanted carefully. Give all necessary information. Use our catalogue number and page wherever possible. If it should happen that we are temporarily out of an article ordered, and unable to secure it without delay, rather than hold shipment and inconvenience you, we may take the liberty of shipping an article similar and of equal quality, in which event you will be promptly notified, and if our action is unsatisfactory you can return the article to us, we assuming all charges.

SHIPPING INSTRUCTIONS

Be sure and state specifically how you wish your order shipped;—whether by freight, express, traction or parcel post. If method of transportation is not indicated, we use our own judgment, choosing the quickest and cheapest route. If the goods are to be shipped to one of your customers and be charged direct to you, kindly give us all necessary data that the invoice may be properly sent you.

TERMS

Our terms are 30 days net or two (2%) per cent for cash in ten (10) days, except on Falcon Casings and Inner Tubes, Automobile Tires and Klaxon Horns, on which items the cash discount is five (5%) per cent instead of two (2%) per cent.

RATINGS

If you are not rated in Dun's or Bradstreet's and do not have a line of credit with us, it will expedite shipment and favor us if you will send us satisfactory reference covering your responsibility, and we will be pleased to open an account with you. If you are in immediate need of the goods, and do not have a rating, we would suggest your sending remittance with order or instructing us to ship C. O. D., sending sufficient funds with your order to insure charges both ways.

REMITTANCES

May be made by check, draft, post office or express money order or currency if the latter is sent in a registered letter.

LIABILITY IN TRANSIT

We exercise the utmost care in the packing and shipping of all orders; when they leave our establishment they are in first-class condition. We are not responsible for loss or damage to goods in transit. Our liability ceases when the goods are delivered to the transportation company and receipted for by them. At the same time, if such cases are reported to us, we will gladly co-operate with our customers in having all claims adjusted.

RETURNED GOODS

Goods returned to us must have all charges prepaid. When returning goods for repairs, credit or exchange, MARK EACH PACKAGE PLAINLY with your name and address. At the same time write us fully by separate mail, giving specific instructions, etc.

CLAIMS

Claims for shortage, damages, etc., must be made within ten days from date of invoice.

PRICES

Quotations made by this Company are subject to change and may be withdrawn without notice.

ERRORS

"To err is human." We make mistakes. We use every vigilance to avoid them. Serving thousands of dealers as we do, with our large organization, errors are bound to creep in. When they happen, we are only too glad to correct them, if the fault lies with us. We can only serve you satisfactorily and hold your trade by giving you the "Square Deal" to which you are entitled.

The Gibson Company





GIBSON QUALITY SPARK PLUGS

Every Essential Found in the Highest Grade Spark Plugs is Incorporated in the "GIBSON QUALITY" SPARK PLUG

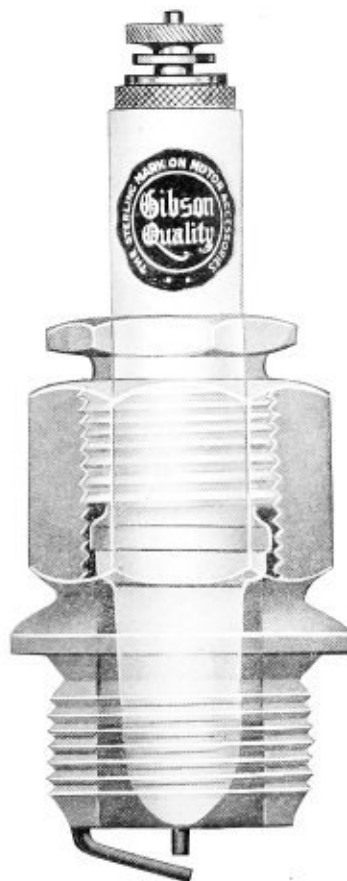
WITH A SERVICE RECORD OF YEARS ON EVERY MAKE OF CAR IT HAS PROVEN ITSELF THE HIGHEST DEVELOPMENT IN EQUIPMENT OF THIS CLASS. IT IS PRODUCED IN A FACTORY DEVOTED TO THE MANUFACTURE OF SPARK PLUGS EXCLUSIVELY, AND IS THEREFORE THE PRODUCT OF SPECIALISTS.

Porcelains are made from the best imported clay, baked to the proper consistency, insuring perfect insulation.

Electrodes are of non-fusible metal, tested for conductivity, heat resistance and expansion.

It has a special gasket construction which after years of experiment has proven the most efficient and best adapted to the service and abuse to which all spark plugs are subjected.

Every detail looking to long and satisfactory service has been provided for, and no matter what price you may pay for a spark plug, it is im-



possible to obtain better service, longer life or more satisfactory operation than you will obtain from the "Gibson Quality" Spark Plug.

For the dealer, this "Gibson Quality" Spark Plug presents an excellent selling proposition. He can offer it to his trade with the full confidence that it will perform the work for which it is intended.

Every "Gibson Quality" Spark Plug is guaranteed by us. Any proving defective in material or workmanship will be replaced free of charge and without question—this means double protection to the user—and insures the dealer a satisfied customer.

Made for every car in a wide range of sizes and styles. Every dealer should carry a complete stock.

Each plug is packed in a neat, heavy cardboard carton.

Licensed under Canfield Patent No. 612701.



"GIBSON QUALITY" SPARK PLUGS

Regular or Standard Type

This is the most popular of all the "GIBSON QUALITY" Plugs. It is used in the large majority of cars. Designed to handle the hottest spark delivered by any magneto. We furnish this plug in all sizes.

$\frac{1}{2}$ inch, $\frac{3}{4}$ inch and Metric, each.....\$1.00

Lots of 12, each..D.P. \$0.66

Lots of 50, each..D.P. \$0.55

Lots of 100, each..D.P. \$0.50

Special Ford and Reo Type

This type has the same excellent qualities of all the "GIBSON QUALITY" Plugs. It was designed to meet the demand for a plug having an extra long shank. It is particularly desirable for Reo and Ford Cars.

$\frac{1}{2}$ inch, each.....\$1.00

Lots of 12, each..D.P. \$0.66

Lots of 50, each..D.P. \$0.55

Lots of 100, each..D.P. \$0.50

Special Overland Type

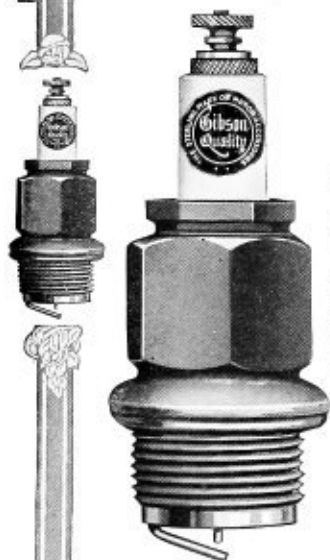
In some models of the Overland an especially long barrel or firing chamber is necessary owing to the thickness of the cylinder heads. This special "GIBSON QUALITY" Overland Plug is built to meet the characteristics of the Overland Motor.

$\frac{1}{2}$ inch long, each.....\$1.00

Lots of 12, each..D.P. \$0.66

Lots of 50, each..D.P. \$0.55

Lots of 100, each..D.P. \$0.50





"GIBSON QUALITY" SPARK PLUGS

Special Buick Type

The motor in Buick cars requires a special plug, having a long barrel and special flanged base. The "GIBSON QUALITY" Plug shown here is the type approved by the Buick Company.

$\frac{3}{4}$ inch long type, each.....	\$1.00
Lots of 12, each..D.P.	\$0.66
Lots of 50, each..D.P.	\$0.55
Lots of 100, each..D.P.	\$0.50



Special Priming Type

One of the handiest and most compact accessories ever designed. The "GIBSON QUALITY" Priming Plug is equipped with a priming cup which forms a part of the barrel. On cold mornings all that is necessary is to drop a little gasoline in the priming cup. This gasoline will flow direct to the sparking point, giving you a quick explosion without the necessity for a long period of cranking. Should be used on every car not equipped with priming cups.

$\frac{1}{2}$ inch, $\frac{3}{4}$ inch and Metric, each..	\$1.50
Lots of 12, each..D.P.	\$1.44
Lots of 50, each..D.P.	\$1.38
Lots of 100, each..D.P.	\$1.33



Special Platinum Point

For the particular motorist who insists on the super-fine we offer the "GIBSON QUALITY" Platinum Point Plug. They have hardened iridio-platinum electrodes and will last a lifetime.

$\frac{1}{2}$ inch, $\frac{3}{4}$ inch and Metric, each.....	\$2.00
Lots of 12, each..D.P.	\$1.44
Lots of 50, each..D.P.	\$1.38
Lots of 100, each..D.P.	\$1.33





SPARK PLUGS

Champion Spark Plugs



Champion Reg.—
½-Inch

The Champion Regular is an extra large, strong and durable plug, having absolutely no freak ideas, mechanically and electrically right, (well made of the finest materials and workmanship), suited to nearly every type of motor and to the most extreme conditions of oil, heat, carbon, etc., beautifully finished in a highly polished nickel or gun metal with black heat-treated case-hardened bushing.

Champion Regular Spark Plugs,
½ inch, ¾ inch or Metric. Retail
price, each.....\$1.00

In ordering state size wanted.

Lots less than 100, each..D.P. \$0.89

Lots 100 or more, each..D.P. .85

Champion Long Spark Plugs have an extension of ½ inch below the threads, bringing the sparking points well down into the cylinder or gas chamber of the motor.

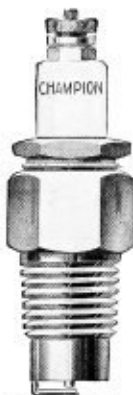
This plug in the ½ inch size was originally designed for the Overland car and for several years has been its standard equipment. It has been found highly desirable in many motors, permitting smoother running at all speeds, especially when at low throttle. Oiling or fouling of spark plugs is entirely eliminated, with an actual gain of power.

Champion Long Spark Plugs, ½
inch Overland or ¾ inch Buick.
Retail price, each.....\$1.00

In ordering state size wanted.

Lots less than 100, each..D.P. \$0.89

Lots 100 or more, each..D.P. .85



Champion Reg.—
Long, ½-Inch



Champion X—
½-Inch

The Champion X is strong, reliable, well made in every respect. It is absolutely compression tight and will stand any amount of oil without fouling or short circuiting.

Champion X Spark Plugs, ½ inch.
Retail price, each.....\$0.75

Lots less than 100, each..D.P. \$0.78

Lots 100 or more, each..D.P. .74

CHAMPION GUARANTEE

Champion plugs are guaranteed to give absolute satisfaction to you. That means we replace any part or plug which you feel has not given you entire satisfaction. We leave it to you.

SPARK PLUGS

Champion Spark Plugs



Champion
One-Piece Heavy
Stone

Champion One-Piece Heavy Stone Plugs are regular factory equipment on 1915 Overlands. Specially made for racing cars. Extra heavy material throughout. Absolutely compression tight. Gun metal finish.

**Champion One-Piece Heavy
Stone Spark Plugs,** ½ inch, ¾
inch or Metric. Each.....\$1.25

Lots less than 100, each..D.P. \$1.26

Lots 100 or more, each..D.P. 1.23

Champion Two-Piece Heavy Stone Plugs, made of extra heavy material throughout. May be easily taken apart and cleaned. Extra durable insulator. Gun metal finish.

**Champion Two-Piece Heavy
Stone Spark Plugs,** ½ inch, ¾
inch or Metric. Each.....\$1.25

Lots less than 100, each..D.P. \$1.26

Lots 100 or more, each..D.P. 1.23



Champion
Two-Piece Heavy
Stone

Champion Priming Plugs will start the coldest motor on the first quarter turn. No leaky pet cock. Has lock attached to needle valve for easy opening and closing. Brings gasoline right at sparking point.



Champion
Priming Plug

Champion Priming Plugs, ½ inch,
¾ inch or Metric. Each.....\$1.25

Lots less than 100, each..D.P. \$1.38

Lots 100 or more, each..D.P. 1.33

IMPORTANT

As a special inducement to dealers in spark plugs, the Champion Spark Plug Company offer, through us, to give free with each order for one hundred Champion plugs—that may be all of one type or assorted, as the trade may desire—a counter display card on which are placed six Champion plugs. These may be half regular and half X or all Champion X. The selling value of these plugs is \$4.50 to \$5.25, and as this is a free gift, every dealer should consider the proposition when making up an order for plugs.



SPARK PLUGS

Rajah Plugs

Rajah Plugs embody no freak ideas nor experiments. On account of the simplicity in construction, it is easy to repair or replace parts, and they are thoroughly mechanical in every feature. No change in construction has been made in over ten years, as none has been found necessary.

No. 2— $\frac{1}{2}$ -Inch

Rajah Ford

Rajah Ford Spark Plugs, $\frac{1}{2}$ inch,
No. 2. Retail price, each....\$1.00

Lots 1 to 11, each...	D.P. \$1.55
Lots 12 to 49, each...	D.P. 1.43
Lots 50 to 99, each...	D.P. 1.38
Lots 100 and up, each...	D.P. 1.32

Rajah Regular

Rajah Spark Plugs, $\frac{1}{2}$ inch, $\frac{3}{4}$ inch
and Metric. Retail price, each..\$1.00

Rajah Spark Plugs, $\frac{1}{2}$ inch long,
for Overland or Reo. Retail
price, each\$1.00

Rajah Spark Plugs, $\frac{1}{2}$ inch long,
for Buick. Retail price, each..\$1.00

Lots 1 to 11, each...	D.P. \$1.55
Lots 12 to 49, each...	D.P. 1.43
Lots 50 to 99, each...	D.P. 1.38
Lots 100 and up, each...	D.P. 1.32

 $\frac{1}{2}$ -Inch

Rajah Giant

The RAJAH Giant Spark Plug is of the same general construction as the regular Rajah Plug, but much heavier in the porcelain and metal parts. It was originally designed for racing purposes and is an ideal plug for those who desire one of this kind.

Rajah Giant Spark Plugs, $\frac{1}{2}$ inch
or $\frac{3}{4}$ inch. Retail price, each..\$1.50

In ordering, state size wanted.

Lots 1 to 11, each...	D.P. \$1.87
Lots 12 to 49, each...	D.P. 1.76
Lots 50 to 99, each...	D.P. 1.70
Lots 100 and up, each...	D.P. 1.65

Giant— $\frac{3}{4}$ -Inch

SPARK PLUGS

Bosch Plugs

The Bosch Plug is scientifically constructed throughout and is the result of a desire to make a good product that will uphold the Bosch reputation. It is sure to satisfy.

The insulator is of Steatite, an almost unbreakable stone, far superior to the porcelain, glass or mica insulators generally used. Steatite is neither brittle nor subject to deterioration by intense heat, extreme pressure or oil; a slip of the wrench will not break it; excessive vibration will not crack it.

Bosch Spark Plugs, $\frac{1}{2}$ inch, $\frac{3}{4}$ inch
or Metric. Retail price, each..\$1.00

In ordering, state size wanted.

Lots of 12, each...	D.P. \$1.55
Lots of 100, each...	D.P. 1.44



Splitdorf Plugs

A porcelain plug with a white India mica insulation. Made in all sizes of the best material obtainable and is absolutely indestructible.

Splitdorf Spark Plugs, $\frac{1}{2}$ inch, $\frac{3}{4}$
inch or Metric. Retail price,
each\$1.00

In ordering, state size wanted.

Each.....D.P. \$1.11

Splitdorf—
Standard $\frac{1}{2}$ -Inch
Plug

Splitdorf Ford

The Splitdorf Ford is of same construction as regular type, but with longer body.

Splitdorf Ford Spark Plugs, $\frac{1}{2}$
inch. Retail price, each.....\$1.00

Each.....D.P. \$1.11

Splitdorf—
Ford Special Plug



SPARK PLUGS

Red Head Plugs

Red Head Spark Plugs are designed and constructed not as an accessory, but with a view of making them an integral part of the engine. They are manufactured in four distinct types, a variety which will enable the user to select the particular plug specified by the builder of the motor to insure its successful operation with minimum fuel consumption.

Red Head Regular



1/2-Inch Regular 3/8-Inch Regular Metric Regular

Red Head Spark Plugs, Regular, 1/2 inch, 3/8 inch or Metric. Retail price, each.....\$.75

In ordering, state size wanted.

Lots of 12, each.....D.P. \$.78

Lots of 100, each.....D.P. .72

Red Head Big Boy

The Red Head Big Boy is a new three-point plug designed to meet the demands of the heavy engine and will give maximum service in any engine. It will cope with modern engine conditions.

Retail price, each.....\$1.00

Lots of 12, each.....D.P. \$1.22

Lots of 100, each.....D.P. 1.11



Big Boy

Red Head Priming Plug for Ford



Priming

This plug solves the problem of starting a cold engine instantly. Gasoline introduced through the cup of the Red Head Priming Plug passes down the canal drilled in the shell, flows along the porcelain and drips directly to the sparking points, where it vaporizes and is ignited. Red Head Priming Plugs can be cleaned without removal from the cylinders. Open the pet-cocks while the engine is running and the compression shoots out the carbon.

Retail price, each.....\$1.25

Lots of 12, each.....D.P. \$1.44

Lots of 100, each.....D.P. 1.33

SPARK PLUGS

Red Head Plugs

Every part of the Red Head Plug is manufactured under the supervision of ignition experts and the processes of the assembly are under rigid inspection. The porcelains are made in the manufacturer's own potteries on automatic turning lathes and they are remarkable for insulating quality, mechanical strength and uniformity—the basis for our guarantee that Red Head porcelains will not crack from the heat of the motor.

Red Head Long Body



Ford and Reo Overland Buick
1/2-Inch Long Body 1/2-Inch Extension 3/4-Inch Extension

Red Head Long Body Spark Plugs, 1/2 inch Ford, 1/2 inch Overland or 3/4 inch Buick. Retail price, each\$.75

In ordering, state size wanted.

Lots of 12, each.....D.P. \$.78

Lots of 100, each.....D.P. .72



Combination

Red Head Combination

The Red Head Combination Plug incorporates the leading features of the two standard insulating bodies—the inner body being porcelain and the outer mica. This insures a plug that will stand outer abuse as well as wear.

Retail price, each.....\$1.25

Lots of 12, each.....D.P. \$1.44

Lots of 100, each.....D.P. 1.33

Red Head Plug Wrenches

A set of wrenches free with each set of four Red Head Plugs.





SPARK PLUGS

Herz Bougie-Mercedes—No Cleaning

Once installed, the plug need never be taken out of the motor. Forms part of the motor, same as the Piston. Not affected by oil. Absolutely Self-Cleaning. No cracking. Porcelain, it's Stone. Recommended where all others fail. A revelation in the construction of Spark Plugs.

The insulation is made of unbreakable stone, which, being pressed and baked at a temperature of over 2,000 degrees, will withstand the highest temperature without cracking.

Bougie-Mercedes Spark Plugs, $\frac{1}{2}$ inch, $\frac{3}{4}$ inch or Metric. Retail price, each.....\$1.50

In ordering state size wanted.

Lots of 12, each..D.P. \$2.00

Lots of 50, each..D.P. \$1.88

Lots of 100, each..D.P. \$1.75



Bougie-Mercedes Long Shank Plugs

The insulation consists of two parts, double stone. The inner member is tapered and is ground into the steel fitting without any packing whatsoever. This prevents the loosening of the insulation. The inner member gradually decreases in size, thus making the plug absolutely self-cleaning.

Every explosion makes the fit tighter and tighter. The outer member of the insulation releases the inner member of all strain and tension from the outside.

Bougie-Mercedes Long Shank Spark Plugs, $\frac{1}{2}$ inch for Ford, Maxwell or Overland, $\frac{3}{4}$ inch for Buick. Retail price, each..\$1.50

In ordering state size wanted.

Lots of 12, each..D.P. \$2.00

Lots of 50, each..D.P. \$1.88

Lots of 100, each..D.P. \$1.75



Bougie-Mercedes—Motorcycle Plugs

The spark plug on a motorcycle should have the terminal protected and insulated.

The Terminal is self-adjustable to the movements of the cable and cannot get loose through vibration. It is easily attached and detached by tightening or unscrewing the knurled thumbnut.

When attached it makes a positive connection. The cable end is simply screwed into the threaded socket of the terminal and electrical connection established through a protruding wood screw.

Bougie-Mercedes Motorcycle Spark Plugs, Metric or $\frac{1}{2}$ inch. Retail price, each.....\$1.50

In ordering state size wanted.

Lots of 12, each..D.P. \$2.00

Lots of 50, each..D.P. \$1.88

Lots of 100, each..D.P. \$1.75



SPARK PLUGS

Soot-Proof Spark Plugs

You can not short-circuit a Soot-Proof Spark Plug. This porcelain has been subjected to the most exhaustive heat tests, and while it is, of course, too much to say that it will not crack under any conditions, still it will stand more severe tests and harder use than any other insulator known, and this porcelain is used only on the Soot-Proof.

The rest of the Soot-Proof Spark Plug is constructed of materials and in a manner worthy of its splendid design and quality.

Soot-Proof Spark Plugs, $\frac{1}{2}$ inch, $\frac{3}{4}$ inch or Metric. Retail price, each.....\$0.75

In ordering state size wanted.

Lots of 12, each..D.P. \$0.78

Lots of 50, each..D.P. \$0.72



Kingston Spark Plugs

The Kingston Spark Plug is a most excellent plug. They are built up of the very best grade of mica with a special fireproof cement under high pressure, then baked at a much higher temperature than they will ever be subjected to in service.

Kingston Mica Spark Plugs, $\frac{1}{2}$ inch, $\frac{3}{4}$ inch or Metric. Retail price, each.....\$0.75

In ordering state size wanted.

Lots of 12, each..D.P. \$0.89

Lots of 50, each..D.P. \$0.83

Lots of 100, each..D.P. \$0.80



Speedway Spark Plugs

Speedway Spark Plugs are designed along conservative lines, using the well-known petticoat type of porcelain, made from imported clay capable of taking a smooth, perfect glazing and of such quality that it will withstand wide ranges of temperature without cracking. Center electrode is exceptionally large and of one solid piece firmly fastened in core. Size and texture make them particularly adaptable to magneto use.

Speedway Spark Plugs, $\frac{1}{2}$ inch or $\frac{3}{4}$ inch. Retail price, each....\$1.00

Speedway Spark Plugs, $\frac{1}{2}$ inch Ford. Retail price, each....\$1.00

In ordering state size wanted.

Lots of 12, each..D.P. \$0.55

Lots of 50, each..D.P. \$0.50

Lots of 100, each..D.P. \$0.44





SPARK PLUGS

"AC" Plugs



Standard "AC" Plug

Regular equipment on a large number of standard cars.

Standard AC Spark Plugs, $\frac{1}{2}$ inch, $\frac{3}{4}$ inch or Metric. Retail price, each\$1.00

In ordering state size wanted.

Lots of 12, each..D.P. \$1.11
Lots of 50, each..D.P. 1.00
Lots of 100, each..D.P. .89

"AC" Special Buick

"AC" Special Buick— $\frac{3}{4}$ inch Extension plug. Has been equipment on Buick Cars for 6 years.

"AC" Special Buick Spark Plugs, $\frac{3}{4}$ inch long. Retail price, each\$1.00

Lots of 12, each..D.P. \$1.11
Lots of 50, each..D.P. 1.00
Lots of 100, each..D.P. .89



"AC" Special Overland

"AC" Special Overland— $\frac{3}{4}$ inch Extension plug with long porcelain. Nearly all other extension plugs use standard porcelains, making necessary a long center electrode which overheats, causes pre-ignition, warps and comes out of adjustment.

"AC" Special Overland Spark Plugs, $\frac{3}{4}$ inch long. Retail price, each\$1.00

Lots of 12, each..D.P. \$1.11
Lots of 50, each..D.P. 1.00
Lots of 100, each..D.P. .89



SPARK PLUGS

"AC" Plugs



"AC" Special Ford

"AC" Special Ford—Extra long porcelain construction, giving great length of insulation which eliminates short circuiting from sooting.

"AC" Special Ford Spark Plugs, $\frac{1}{2}$ inch. Retail price, each....\$1.00

Lots of 12, each..D.P. \$1.11
Lots of 50, each..D.P. 1.00
Lots of 100, each..D.P. .89

"AC" Titan

"AC" Titan—Very efficient plug, will stand on highest speed motor, with long stroke, high compression.

"AC" Titan Spark Plugs, $\frac{1}{2}$ inch, $\frac{3}{4}$ inch or Metric. Retail price, each.....\$1.00

In ordering state size wanted.

Lots of 12, each..D.P. \$1.22
Lots of 50, each..D.P. 1.11
Lots of 100, each..D.P. 1.00



Cico

Cico—A very high-grade plug at a low price. Absolutely gas-tight.

Cico Spark Plugs, $\frac{1}{2}$ inch, $\frac{3}{4}$ inch or Metric. Retail price, each\$.75

In ordering state size wanted.

Lots of 12, each..D.P. \$.83
Lots of 50, each..D.P. .78
Lots of 100, each..D.P. .74



SPARK PLUGS



Bethlehem Five Point Spark Plugs

Special Alloy, forged by the famous Bethlehem Steel Company, is used in the shell and electrodes of Bethlehem Plugs. No heat generated in any motor car breaks the Bethlehem porcelain.

Regular Type Bethlehem Spark Plugs, $\frac{1}{2}$ inch, $\frac{3}{4}$ inch or Metric.
Retail price, each.....\$1.25

Lots of 12, each.....D.P. \$1.22
Lots of 50, each.....D.P. 1.11
Lots of 100, each.....D.P. 1.06

Bethlehem Ford Type

Bethlehem Five Point Spark Plugs shoot the spark as near the center of the sphere of combustion as possible, down into the cylinder, not up in the plug chamber.

Type A Bethlehem Ford Special Spark Plugs, $\frac{1}{2}$ inch. Retail price, each.....\$1.25

Lots of 12, each.....D.P. \$1.22
Lots of 50, each.....D.P. 1.11
Lots of 100, each.....D.P. 1.06



Bethlehem Overland Type

The Bethlehem Five Point Spark Plugs have been proven. They are a success. The multiple sparking point idea is correct.

Type C Bethlehem Spark Plugs, $\frac{1}{2}$ inch long, for Overland, Winton and Reo. Retail price, each.....\$1.25

Lots of 12, each.....D.P. \$1.22
Lots of 50, each.....D.P. 1.11
Lots of 100, each.....D.P. 1.06



SPARK PLUGS

Bethlehem Buick Type

Bethlehem Plugs are guaranteed for the life of the car if the proper plug is properly placed in the proper car.

Type D Bethlehem Spark Plugs, $\frac{1}{2}$ inch long, for Buick. Retail price, each.....\$1.25

Lots of 12, each.....D.P. \$1.22
Lots of 50, each.....D.P. 1.11
Lots of 100, each.....D.P. 1.06



Bethlehem Motorcycle Plugs

Mica Motorcycle Plugs. Core made of highest grade India mica.

Bethlehem Motorcycle Mica Spark Plugs, $\frac{1}{2}$ inch or Metric. Retail price, each.....\$1.25

Lots of 12, each.....D.P. \$1.22
Lots of 100, each.....D.P. 1.11



Bethlehem Spark Plug Display Case



The New Bethlehem Spark Plug Display Case contains 54 assorted sizes and types of Bethlehem spark plugs and six extra porcelains. A well-rounded stock. Height, 15 inches; width, 10 inches; depth at base, 8 inches. Weight, 25 pounds with contents. Packed in specially-built wooden case. Full supply literature and display matter packed with each case.

Price.....D.P. \$55.55
which represents cost of plugs only, no charge being made for case or display plugs.



THE GIBSON COMPANY INDIANAPOLIS



SPARK PLUGS

Mosler "Vesuvius" Plug



Absolutely gas tight. Can be taken apart easily and reassembled absolutely gas tight. The stone-insulated Plug par excellence, will outlast your motor. Innumerable sparking points because of continuous knife edge electrode, speed and power.

Mosler Vesuvius Plug, 1/2 inch, 3/8 or Metric, each \$1.25
Dozen.....D.P. \$20.00

Mosler "S. A. E."

Buick



A plug made especially for engines with a high compression. We highly recommend this plug in view of the very high grade workmanship and material supplied. It is easily separable for cleaning purposes. Made in two lengths. Standard used in Empire car, long being used with great satisfaction in Buick car. Mosler S.A.E. Plug, 3/4 Regular or 1/2 Long, each.....\$1.00
Dozen.....D.P. \$10.66

Mosler "Spit-Fire" Plugs

Platinum Pointed



The end of the base being protected makes "Spit-Fire" stand soot, oil and water. All platinum point Plugs are boxed with the Red Tag Guarantee. Made to fit any engine, any thread. Actually Spits Fire while others spark only, thereby giving hotter spark, greater power, energetic ignition. Platinum points last forever. Mosler Spit-Fire Platinum Point Spark Plug, 1/2 inch, 3/8 or Metric, each.....\$1.50
Dozen.....D.P. \$24.00

Mosler "Superior"



This plug is especially made to meet the requirements of the Ford Model "T" engine. The design is endorsed by their leading engineers. We guarantee this Plug as to workmanship and material.

Mosler Superior Spark Plug, 1/2 inch or 3/4 inch, each \$1.00
Dozen.....D.P. \$8.00

No Name Plug

A satisfactory low priced plug.
No Name Spark Plug 1/2 inch
only, each\$0.50
Dozen.....D.P. \$4.44



Pasha Plugs



Pasha Plugs have genuine imported porcelains and electrodes, the porcelains being permanently sealed in the shell, making an absolutely reliable one-piece Plug. A genuine Thumb Nut Clip Terminal is furnished with each Plug.

Pasha Spark Plug, 1/2 inch or 3/4 A.L.A.M., each.....\$0.75
Less than 50.....each.....D.P. \$0.82
50 to 100each.....D.P. .77
100 lotseach.....D.P. .73



SPARK PLUG PARTS

Gibson Quality Porcelains



Gibson Quality Porcelains for Magneto Plugs, each.....	\$0.35
Gibson Quality Porcelains for Ford Plugs, each.....	.35
Gibson Quality Porcelains for Overland Plugs, each.....	.35
Gibson Quality Porcelains for Buick Plugs, each.....	.35
Gibson Quality Porcelains for Priming Plugs, each.....	.35
In dozen lots, each, \$0.33.	
Gibson Quality Platinum Point Porcelains, each.....	.75
In dozen lots, each, D.P. \$0.83.	

Bethlehem Porcelains

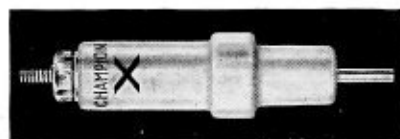


Bethlehem Porcelains all types, each.....	.40
In dozen lots, each, D.P. \$0.44	

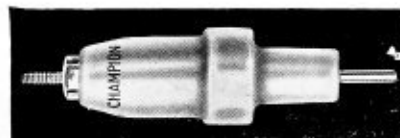
Champion Porcelains



Porcelains for Champion Regular Plugs, retail price, each ..40	
In dozen lots, each, D.P. \$0.55.	
Porcelains for Champion Long Plugs, retail price, each.. .40	
In dozen lots, each, D.P. \$0.55.	



Porcelains for Champion X Plugs, retail price, each.....	.35
In dozen lots, each, D.P. \$0.45.	
Porcelains for Champion Priming Plugs, retail price, each ..40	
In dozen lots, each, D.P. \$0.60.	



Champion Heavy Stone Porcelains, each.....	.50
In dozen lots, each, D.P. \$0.73	
Lower Gaskets for Champion Porcelains, retail price, each ..03	
In dozen lots, D.P. \$0.40.	
Upper Copper Washers for Champion Porcelains, retail price, each .....	.03
In dozen lots, D.P. \$0.40.	
Asbestos Gaskets for upper portions Champion Porcelains, price, each .....	.03
In dozen lots, D.P. \$0.40.	

"AC" Porcelains



"AC" Porcelain—for all "AC" Plugs made up to 1912, retail price, each	\$0.35
In dozen lots, each, D.P. \$0.55.	



"AC" 1 Porcelain—Standard Porcelain for 1913 plugs (order by number), retail price, each .....	.35
In dozen lots, each, D.P. \$0.55.	



"AC" 2 Porcelain—for Special Ford, long 3-inch priming plug (order by number), retail price, each.....	.35
In dozen lots, each, D.P. \$0.55.	



"AC" 3 Stone Insulator—for motorcycle plug (order by number), retail price, each .....	.35
In dozen lots, each, D.P. \$0.55.	



Brass Washer for all plugs up to 1912, retail price, each .....	.03
Per dozen, D.P. \$0.66.	

Copper Asbestos Gasket for 1913 plugs, retail price, each.....	\$0.02
Per dozen, D.P. \$0.33.	



Steel Washer for 1913 plugs, retail price, each	\$0.02
Per dozen, D.P. \$0.33.	

"AC" Quick Detachable Terminal, Used on Buick Chevrolet, Olds and others, retail price, Each	\$0.25
Per dozen, D.P. \$3.24.	



Titan Corrugated Aluminum Gasket, retail price, each	\$0.03
Per dozen, D.P. \$0.66.	

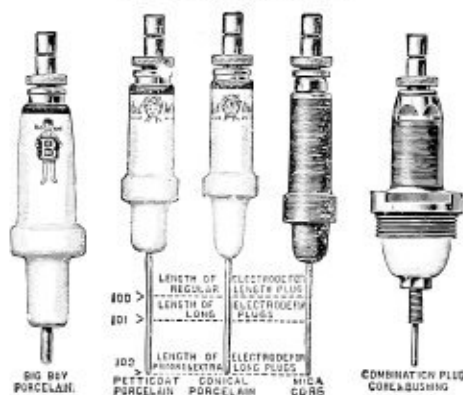
"AC" Clip Terminal. Can not jar loose, retail price, each	\$0.08
Per dozen, D.P. \$1.56	





SPARK PLUG PARTS

Red Head Porcelains



Porcelains for Red Head, Regular. Each.....\$0.45
 Porcelains for Red Head, Long Body. Each..... .45
 In dozen lots, each..D.P. \$0.62

Porcelains for Red Head, Big Boy. Each..... .50
 In dozen lots, each..D.P. \$0.73

Porcelains for Red Head, Combination. Each.... .75
 In dozen lots, each..D.P. \$1.11

Porcelains for Red Head, Priming. Each..... .50
 In dozen lots, each..D.P. \$0.73

Soot-Proof Porcelains

Porcelains for Soot-Proof Plugs. Retail price, each.\$0.40
 In dozen lots, each..D.P. \$0.44

Speedway Porcelains

Porcelains for Speedway Plugs. Retail price, each.\$0.30
 In dozen lots, each..D.P. \$0.33

Rajah Porcelains



Rajah Porcelains for Regular Plugs. Retail price, each.....\$0.50
 In dozen lots, each..D.P. \$0.78

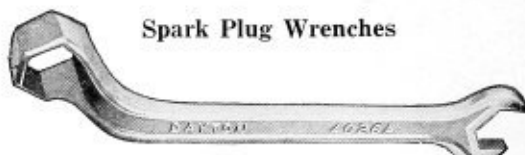
Rajah Porcelains for Ford Plugs. Retail price, each.\$0.50
 In dozen lots, each..D.P. \$0.78

Rajah Giant Porcelains

Rajah Porcelains for Giant Plugs. Retail price, each.....\$0.65
 In dozen lots, each..D.P. \$0.88.

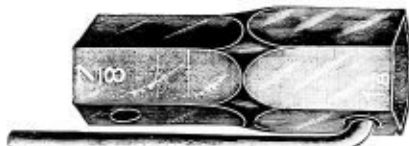
SPARK PLUG ACCESSORIES

Spark Plug Wrenches



No. 1 Spark Plug Wrench $\frac{3}{4}$ Hex closed end, $\frac{1}{2}$ Hex open end, janned, each.....\$0.20
 In dozen lots, each..D.P. \$0.20

No. 2 Spark Plug Wrench $\frac{3}{4}$ Hex closed end, $\frac{1}{2}$ Hex open end, nicked, each.....\$0.30
 In dozen lots, each..D.P. \$0.33



No. 4 Two In One Spark Plug Wrench $\frac{3}{4}$ and 1 inch, nicked, each.....\$0.50

No. 5 Two In One Spark Plug Wrench, $\frac{3}{4}$ and $1\frac{1}{2}$ inch, nicked, each..... .50
 In dozen lots, each..D.P. \$0.55



Champion Priming Plug Wrench, complete wrench for all sizes and styles of spark plugs. Retail price, each.....\$0.50
 In dozen lots, each..D.P. \$0.55



No. 3 Buckeye Combination Spark Plug Wrench and tire tool. One end made to fit a standard $\frac{1}{2}$ -inch plug ($\frac{1}{2}$ inch across the hex), and this same end "stepped" so as to take care of the odd size plugs which measure $15/16$ inch across the hex. The other end made to fit a standard A. L. A. M. plug with large shoulder, and measuring $1\frac{1}{2}$ inch across the hex.

Retail price, each.....\$0.50
 In dozen lots, each..D.P. \$0.66

Spark Plug Brush



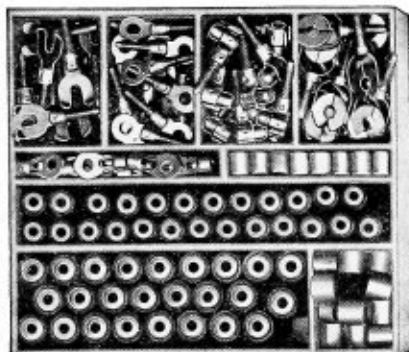
A very handy article to clean your spark plugs with. Has strong wire for grease and dirt, bristle hair for finer parts and two tempered thin flat steels with which to reach inaccessible parts.

Retail price, each.....\$0.25
 In dozen lots, each..D.P. \$0.27



TERMINALS

Becco Terminal Assortment



Becco Terminals save their cost in cable ends, solder and trouble. The most saleable terminal on the market and the most practical for dealers or garagemen's use.

THE BOX CONTAINS

25 Spring Clip Terminals.....	Price 15c each—\$3.75
25 Post Terminals.....	Price 15c each— 3.75
25 Slot Terminals.....	Price 10c each— 2.50
25 Eyelet Terminals.....	Price 10c each— 2.50
25 Primary Terminals.....	Price 5c each— 1.25
25 Fibres for 9 MM Cable.	
25 Fibres for 7 MM Cable.	
25 Brass Ferrules for 9 MM Cable.	
25 Brass Ferrules for 7 MM Cable.	

Entire contents \$13.75

Per box....D.P. \$11.10

Becco Terminals



Slot Type

Becco Terminals, Slot
Type, each\$.10
Per dozen.....D.P. \$1.11
Per box of 50..D.P. 3.06



Eyelet Type

Becco Terminals, Eyelet
Type, each\$.10
Per dozen.....D.P. \$1.11
Per box of 50..D.P. 3.06



Type With Posts

Becco Terminals, Post
Type, each\$.15
Per dozen.....D.P. \$1.44
Per box of 50..D.P. 5.10

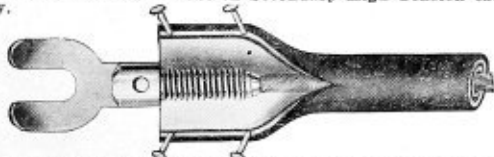


Spring Clip Type

Becco Terminals, Spring
Clip Type, each.....\$.15
Per dozen.....D.P. \$1.44
Per box of 50..D.P. 5.10

Directions for Use of Becco Terminals

The cut below shows the hollow screw terminal after it has been screwed into the cable, with the rubber insulation cut open to see just how the wire strands enter the hole in the screw to make electrical contact. If you doubt this try it yourself by screwing the terminal into a short piece of cable and cut the insulation of the cable open to expose the result. The screw terminals are for use on Secondary High Tension cables only.



To fasten the screw terminals, take the cable end in one hand and the terminal in the other, moisten the screw and press the point of the screw into the end of the cable so that the wires will enter the hole of the terminal; then screw the terminal up to the shoulder by pressing and turning the same as you do when you force a wood screw.

If brass ferrules or fibre sleeves are used, the ferrules or fibres are first placed on the cable and the screw terminal is threaded into the cable through the hole in the ferrule or fibre.

TERMINALS

Clip Terminals



Clip Terminal, inside diameter .390 for single braided and 5 M.M. Primary Rubber Cable. Per dozen.....\$.60

Clip Terminal, inside diameter .235 for double braided Primary Cable. Per dozen.....\$.60

Clip Terminal, inside diameter .310 for wrapped Magneto and double braided Magneto Cable. Per dozen.....\$.60

Clip Terminal, inside diameter .325 for Secondary and 9 M.M. Rubber Cable. Per dozen.....\$.60

Clip Terminal, inside diameter .400 for medium Secondary Braided Cable. Per dozen.....\$.60

Clip Terminal, inside diameter .475 for Secondary Braided and 12 M.M. Rubber Cable. Per dozen.....\$.60

All sizes, per dozen..D.P. \$.44

Per 100.....D.P. 3.20

E. G. Terminal Assortment

The box contains every type of terminal and battery connector that is in demand—each style is in a separate compartment—on the inside cover of the box there are illustrations that show how and where the terminals are used, and templates to guide you in quickly fitting any size of cable.



AT LIST PRICE

At 1 1/2c each—\$0.375

- 25 Eye Terminals
- 25 190 Clip Terminals
- 25 335 Clip Terminals
- 25 310 Clip Terminals
- 25 325 Clip Terminals
- 25 400 Clip Terminals
- 25 475 Clip Terminals

150 Clip Terminals

At 5c each— 7.50

- 4 310 Fibre Clip Terminals
- 4 400 Fibre Clip Terminals
- 4 475 Fibre Clip Terminals

12 Fibre Clip Terminals

At 7 1/2c each— .90

- 4 9/32 in. Fibre Magneto Terminals
- 4 13 32 in. Fibre Magneto Terminals
- 4 15 32 in. Fibre Magneto Terminals

12 Fibre Magneto Terminals

At 10c each— 1.20

- 6 Combination Terminals
- 50 Plain Battery Connectors
- 50 Holdfast Battery Connectors
- Display Box

At 10c each— .60

At 2c each— 1.00

At 5c each— 2.50

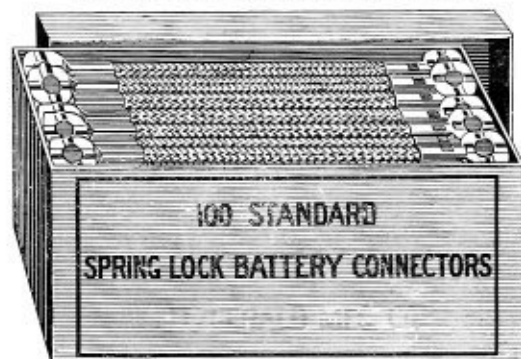
Total\$14.07

Per box....D.P. \$11.10



BATTERY CONNECTORS

Standard Spring Lock Connectors



Standard Battery Connectors, with corrugated tips. Have sufficient spring to lock thumb nut, insuring perfect contact.

Per dozen.....\$0.30

Per dozen..D.P. \$0.33

Per 100.....\$1.50

Per 100...D.P. \$1.66



Perfection Connectors

Perfection Spring Battery Connector is a distinct improvement over other Spring Connectors and can be used with or without nut.

Per dozen.....\$0.70

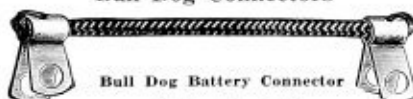
Per dozen..D.P. \$0.77

Per 100.....\$5.00

Per 100...D.P. \$5.00



Bull Dog Connectors



Bull Dog Battery Connector

Per dozen.....\$1.00

Per 100.....\$7.50

Per dozen..D.P. \$0.78

Per 100...D.P. \$7.22

Copper Terminals



No. 1

No. 1 Copper Terminals for small size Primary Cable (5/32 to 3/16).



No. 2

No. 2 Copper Terminals for most of the Primary Cable (3/16 to 1/2).

Per dozen.....\$0.25

Per dozen.....\$0.35

Per 100...D.P. \$0.44

Per 100...D.P. \$0.88



No. 3

No. 3 Copper Terminals for average size Secondary Cable (5/16 to 3/4).



No. 4

No. 4 Copper Terminals for large Secondary Cable (7/16 to 1).

Per dozen.....\$0.40

Per dozen.....\$0.50

Per 100...D.P. \$1.55

Per 100...D.P. \$2.44

TERMINALS

Handy Box

An assortment of 100 Battery connections, 100 each of Nos. 2 and 3, and 50 each of Nos. 1 and 4 Copper Terminals, put up in a substantial wooden box. This assortment contains about the average quantities of the various sizes. Very handy in every garage.



No. 9 Handy Box, each.....\$4.00

Per box..D.P. \$4.44

Assortment "Rajah" Terminals



This box contains 118 Rajah Terminals—98 Clip and 20 Primary—in the styles and sizes mostly used. The assortment is particularly valuable for garages, dealers and repair shops.

Per Box.....\$10.00

Per box..D.P. \$12.20

Rajah Regular Clip Terminals



These are furnished with collar nut as shown, which fits any spark plug.

No. 4. Clip Terminals, complete, each.....\$0.10

Per dozen..D.P. \$1.33



Rajah Stud Terminal makes Champion Terminals fit Rajah Plugs, without alteration.

Each.....\$0.10

Per dozen..D.P. \$1.33



Rajah Thumb Nut Terminal, each....\$0.10

Per dozen..D.P. \$1.33



FIRE EXTINGUISHERS

Pyrene Fire Extinguishers



Pyrene Bracket

Pyrene Fire Extinguisher

The use of Pyrene Fire Extinguishers reduces automobile fire insurance premium 15%. Saving on insurance will pay for Extinguisher. It is also invaluable for garage protection because it is the best means of extinguishing burning gasoline and other obstinate blazes. It is a permanent investment. It is guaranteed against mechanical defects, poor workmanship and material and against freezing. It weighs without holder 6 pounds, or with vehicle bracket about 7 pounds. It is substantially built of brass and will throw a stream of Pyrene Liquid about 30 feet. A few squirts of the Liquid usually suffice to extinguish a fire. The balance may be preserved for future use indefinitely provided handle is merely unlocked. When empty it can be easily refilled with Pyrene Liquid. A vehicle bracket is necessary for automobile use.

Pyrene Fire Extinguisher, Brass, each.....	\$7.00
Each..D.P.	\$13.22
Pyrene Fire Extinguisher, Nickered, each.....	8.00
Each..D.P.	\$15.10
Enameled Bracket for Pyrene Extinguisher, each..	.50
Each..D.P.	\$0.95
Brass Bracket for Pyrene Extinguisher, each.....	.75
Each..D.P.	\$1.42
Nickered Bracket for Pyrene Extinguisher, each..	1.00
Each..D.P.	\$1.88
Pyrene Liquid, quart, each.....	1.25
Per quart..D.P.	\$2.20
Pyrene Liquid, gallon, each.....	4.50
Per gallon..D.P.	\$8.48

Fire-Fly Extinguishers



Fire-Fly is a dry powder fire extinguisher and it does the work.

It is put out in convenient size tubes and does not contain any grit, therefore will not injure the bearings should it be thrown onto the engine or working parts of the machine.

Fire-Fly Fire Extinguisher, large size, each.....	\$1.00
Each..D.P.	\$0.78
Dozen..D.P.	\$8.33
Fire-Fly Fire Extinguisher, small size, each.....	.75
Each..D.P.	\$0.66
Dozen..D.P.	\$6.66

Alenco Underwriters' Chemical Extinguishers



The Alenco Extinguisher is made of the very best grade of Lake Superior Cold Rolled Copper. The lapped joints are first tinned and copper riveted, then the solder sweat through to the outer edge of the laps with the rivet heads well covered with solder on the inside. The dome and bottom are formed by stamping, which gives uniform strength and eliminates the unevenness of a spun shell; the inside of the shell and all parts are heavily coated, where necessary, after being formed, with a metal mixture to prevent corrosion.

We have several features in the Alenco machines which make them more valuable, such as the hose clamps, which allow the hose to be replaced by the simple use of a screwdriver; the neck of the bottle is ground to a flat surface, and each stopple is ground to fit each bottle, which keeps the air from the acid; the strong construction of the bottle cage and the general finish of the machine throughout.

The normal finish of the extinguisher is red enamel baked on. We recommend this finish as it is distinctive of fire apparatus and it is impossible for it to tarnish. Polished copper finish can also be supplied without extra charge.

Weight, empty, 17 pounds. Weight, charged and ready for use, 36 pounds. Duration of stream, 1½ minutes. Capacity, 3 gallons. Chemical charge Bi-Carbonate of Soda, 1½ pounds. Commercial Sulphuric Acid, 4 fluid ounces. Distance a stream is thrown, 45 to 50 feet. Cost of chemicals to recharge, 50 cents. Maximum pressure in operation, 120 pounds. Extinguisher tested to 400 pounds. Bursting pressure, 600 pounds. Safety factor, 480 pounds. Experience required to use, none. Experience required to recharge, none.

Alenco Fire Extinguisher, each.....	\$12.00
Each—D.P.	\$20.00



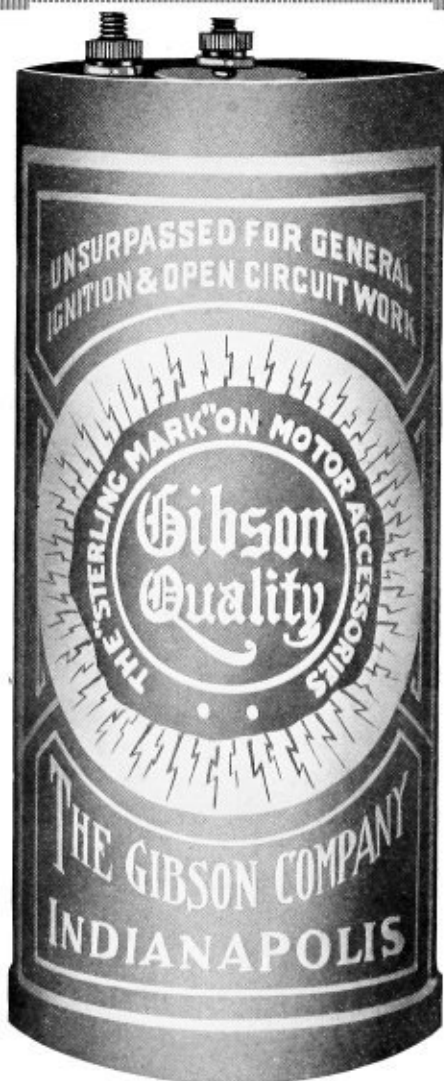
GIBSON QUALITY DRY BATTERIES

The Highest Grade Dry Cell Manufactured is the
"GIBSON QUALITY"

THIS STATEMENT IS PROVEN BY THE ENORMOUS SALE THIS BATTERY HAS
ENJOYED SINCE ITS APPEARANCE ON THE MARKET SEVERAL YEARS AGO

Manufactured from the best zinc, carbon and chemicals to be found in the world's markets; by the most modern machinery ever devised; subjected to every known test and properly aged—they are as near perfect as human ingenuity, high grade machinery and modern methods can produce.

Every "Gibson Quality" Battery is guaranteed, covering long life, high amperage and quick recuperation. We will replace any not meeting our claims in these respects.



The Dealer who has had trouble providing a satisfactory Dry Cell for his trade should carry "Gibson Quality" Batteries; it means elimination of all worry in that direction and besides guarantees him a profit.

The "Gibson Quality" Battery is a salable article; they are neat appearing and clean cut, attractive and uniform and they are just as good as they look.

We have a special bonus contract on these cells which every dealer should investigate; it will help you double your battery profits.

THE "Gibson Quality" Battery IS THE BEST PRODUCED
AND CARRIES A TRIPLE GUARANTEE

BATTERIES

"Gibson Quality" Dry Batteries Round Cartons



This battery, which is fully described on the preceding page, is positively the best obtainable for general ignition and open circuit work. Its long life makes it particularly desirable for flash light and battery lantern service.

Gibson Quality Dry Cells in round cartons, each\$0.25

Small quantities, eachD.P. \$.38

Half-barrel lots (62), each..D.P. .36

Barrel lots (125), eachD.P. .34

"Gibson Quality" Dry Batteries Square Cartons

Some of our customers prefer the square carton, and we are prepared to furnish them their requirements in this shape. The battery is exactly the same as the round type in material, construction and service.

Gibson Quality Dry Cells, in square cartons, each\$0.25

Small quantities, eachD.P. \$.38

Half-barrel lots (62), each..D.P. .36

Barrel lots (125), eachD.P. .34



Dealers—Our Special Bonus Battery contract should be in your hands. It is one of the most attractive propositions we have ever offered. Send for it!

Columbia Ignitors

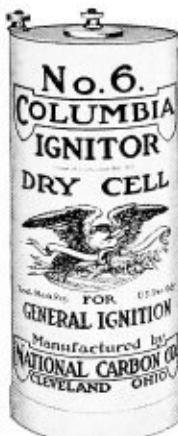
Columbia Ignitors, made especially for heavy ignition work. Ignitors are supplied by us from a stock which is always fresh.

Columbia Ignitor Dry Cells, each.....\$.25

Small quantities, each..D.P. \$.45

Half-barrel lots (62), each..D.P. .42

Barrel lots, each..D.P. .39



Columbia Regular

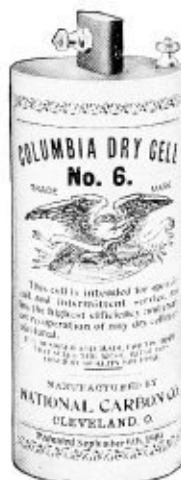
The Columbia Regular Battery will stand hard and heavy service. When properly packed it is not injured by transportation.

Columbia Regular Dry Cells, each.....\$.25

Small quantities, each..D.P. \$.44

Half-barrel lots (62), each..D.P. .40

Barrel lots (125), each..D.P. .36



Columbia Multiple Battery



A unit battery for every type of ignition and heavy service. Convenient—not necessary to wedge cells in place. Only two connections to be made. All connections are soldered. Waterproof—A hermetically sealed can makes the battery impervious to the action of water.

No. 356. Columbia Multiple Battery, each....\$5.00
Dimensions. 13½ long, 8½ wide, 8½ high.
Each..D.P. \$9.44



BATTERIES

Willard L-B-A Storage Batteries

The Willard L-B-A Starting and Lighting Batteries listed below possess to a marked degree the qualities which are most desirable for electric starting and lighting. The torque of the starting motor is dependent to a great degree on the capacity of the battery to maintain voltage. The development of a storage battery involves many problems the same as all other kinds of apparatus. The THREE VITAL POINTS, however, are found in every L-B-A Battery, viz:

High Voltage Maintenance.

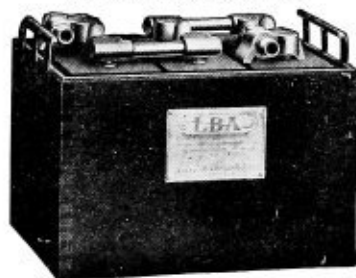
Low Heat Characteristics.

Ability to maintain output over a long period of time.

We believe that no battery manufactured possesses the distinct necessary features of the L-B-A. The qualities have been developed by constant experimentation and practical use in every kind of service for six years. There are more L-B-A batteries in use today than all other batteries on the market combined.

Willard L-B-A Starting Battery

(For Starting and Lighting)



Starting

Type	Volt	Capacity Amp. Hrs.	No. Hrs. Continuous Burning 30 C. P. Load	Width	Height	Length	Price
SLB—68	6	80	19	7%	8%	10 1/2	\$33.00
Each..D.P.		\$36.66					
SSB—68	6	80	19	5%	10%	10 1/2	33.00
Each..D.P.		\$36.66					
SLB—610	6	100	22	7%	8%	12	39.00
Each..D.P.		\$43.33					
SSB—610	6	100	22	5%	10%	12	39.00
Each..D.P.		\$43.33					
SLB—612	6	120	27	7%	8%	14%	43.00
Each..D.P.		\$47.77					
SSB—612	6	120	27	5%	10%	14%	43.00
Each..D.P.		\$47.77					
SLB—616	6	160	33	7%	8%	17 1/4	50.00
Each..D.P.		\$55.55					
SLB—616	6	160	33	5%	10%	17 1/4	50.00
Each..D.P.		\$55.55					

Furnished with either Terminal Leads burned to Terminal Posts, or arranged for bolted connectors. State type desired when ordering. We can supply WILLARD L-B-A Batteries in higher voltages. Write for special catalogue if interested.

Willard L-B-A Batteries are charged before shipping, but before placing in operation they should be tested to determine if the specific gravity is correct. This should be done with an accurate hydrometer syringe.

A battery fully charged should read 1250 on the hydrometer scale. This being the 100 per cent. condition, the various percentages of strength are as follows:

1250 indicates.....	100%	1175 indicates.....	40%
1225 indicates.....	80%	1150 indicates.....	20%
1200 indicates.....	60%	1125 .....exhausted	00%

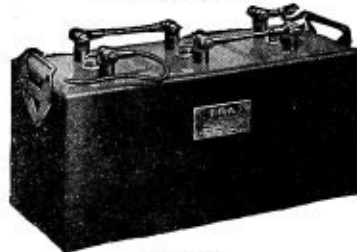
The hydrometer should float freely in the solution before taking a reading.

When the solution is poured into the battery it should come to the top of the plates. Do not overfill. Do not underfill.

With each battery will be found a copy of Bulletin No. 40, which gives full instructions regarding care, maintenance, operation and recharging of Willard L-B-A Starting and Lighting Batteries.

Willard L-B-A Lighting Batteries

(For Lighting Only)



Lighting

Can be used for Generating Systems but not for Starting Systems.

Type	Volt	Capacity Amp. Hrs.	No. Hours Continuous Burning 30 C. P. Load	Width	Height	Length	Price
ELB—62	6	20	4	7 1/8	8%	5 1/2	\$15.00
Each..D.P.		\$16.66					
ELB—63 1/2	6	35	7	7%	9 1/4	6 3/4	18.00
Each..D.P.		\$20.00					
ELB—65	6	50	10	7%	9 1/4	8 1/4	21.00
Each..D.P.		\$23.33					
ELB—66	6	60	14 1/2	7%	9 1/4	9%	24.00
Each..D.P.		\$26.66					
ELB—68	6	80	19	7%	9 1/4	10 1/2	27.00
Each..D.P.		\$30.00					
ELB—610	6	100	22	7%	9 1/4	12	30.00
Each..D.P.		\$33.33					
ELB—612	6	120	27 1/2	7%	9 1/4	14%	33.00
Each..D.P.		\$36.66					

Furnished with either Terminal Leads burned to Terminal Posts, or arranged for bolted connectors. State type desired when ordering. We can supply WILLARD L-B-A Batteries in higher voltages. Write for special catalogue if interested.



BATTERIES

Willard Starting Batteries



12-VOLT

Type	Length, Inches	Width, Inches	Height, Inches	Each
SLB-123 $\frac{1}{2}$	12 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$	\$42.00
Each D.P.	\$46.66			
SLB-125	15	7 $\frac{1}{2}$	8 $\frac{1}{2}$	51.00
Each D.P.	\$56.66			
SLB-126	17 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$	59.00
Each D.P.	\$65.55			
SLB-128	20 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$	66.00
Each D.P.	\$77.77			
SLB-1210	23	7 $\frac{1}{2}$	9	72.00
Each D.P.	\$80.00			
SSB-123 $\frac{1}{2}$	12 $\frac{1}{2}$	5 $\frac{1}{2}$	10 $\frac{1}{2}$	42.00
Each D.P.	\$46.66			
SSB-125	15	5 $\frac{1}{2}$	10 $\frac{1}{2}$	51.00
Each D.P.	\$56.66			
SSB-126	17 $\frac{1}{2}$	5 $\frac{1}{2}$	10 $\frac{1}{2}$	59.00
Each D.P.	\$65.55			
SSB-128	20 $\frac{1}{2}$	5 $\frac{1}{2}$	10 $\frac{1}{2}$	66.00
Each D.P.	\$77.77			
SSB-1210	23	6 $\frac{1}{2}$	10 $\frac{1}{2}$	72.00
Each D.P.	\$80.00			
STB-125	15	7 $\frac{1}{2}$	8 $\frac{1}{2}$	51.00
Each D.P.	\$56.66			

16-VOLT

SLB-163 $\frac{1}{2}$	16 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$	\$56.00
Each D.P.	\$62.22			
SLB-165	19 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$	68.00
Each D.P.	\$75.55			
SLB-166	23 $\frac{1}{2}$	7 $\frac{1}{2}$	9	78.00
Each D.P.	\$86.66			
SSB-163 $\frac{1}{2}$	16 $\frac{1}{2}$	5 $\frac{1}{2}$	10 $\frac{1}{2}$	56.00
Each D.P.	\$62.22			

Willard Starting Batteries



16-VOLT—Continued

Type	Length, Inches	Width, Inches	Height, Inches	Each
SSB-165	19 $\frac{1}{2}$	5 $\frac{1}{2}$	10 $\frac{1}{2}$	\$68.00
Each D.P.	\$75.55			
SSB-166	23 $\frac{1}{2}$	6 $\frac{1}{2}$	10 $\frac{1}{2}$	78.00
Each D.P.	\$86.66			

18-VOLT

SLB-183 $\frac{1}{2}$	19	7 $\frac{1}{2}$	8 $\frac{1}{2}$	\$63.00
Each D.P.	\$70.00			
SLB-185	22 $\frac{1}{2}$	7 $\frac{1}{2}$	9	76.00
Each D.P.	\$84.44			
SLB-186	26 $\frac{1}{2}$	7 $\frac{1}{2}$	9	87.00
Each D.P.	\$96.66			
SSB-183	19	5 $\frac{1}{2}$	10 $\frac{1}{2}$	63.00
Each D.P.	\$70.00			
SSB-185	22 $\frac{1}{2}$	6 $\frac{1}{2}$	10 $\frac{1}{2}$	76.00
Each D.P.	\$84.44			
SSB-186	26 $\frac{1}{2}$	6 $\frac{1}{2}$	10 $\frac{1}{2}$	87.00
Each D.P.	\$96.66			

24-VOLT

SLB-242	19 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$	\$72.00
Each D.P.	\$80.00			
SLB-243 $\frac{1}{2}$	25 $\frac{1}{2}$	7 $\frac{1}{2}$	9	87.00
Each D.P.	\$96.66			
SLB-245	29 $\frac{1}{2}$	7 $\frac{1}{2}$	9	102.00
Each D.P.	\$113.33			
SSB-242	19 $\frac{1}{2}$	5 $\frac{1}{2}$	10 $\frac{1}{2}$	72.00
Each D.P.	\$80.00			
SSB-243 $\frac{1}{2}$	25 $\frac{1}{2}$	6 $\frac{1}{2}$	10 $\frac{1}{2}$	87.00
Each D.P.	\$96.66			
SSB-245	29 $\frac{1}{2}$	6 $\frac{1}{2}$	10 $\frac{1}{2}$	102.00
Each D.P.	\$113.33			

Capacity of Storage Batteries

The capacity of a battery is measured in ampere hours. The volume of current flow is measured in amperes. A current of one ampere flowing for one hour is the unit by which capacity is measured, and is called ampere hour. A 50-ampere hour battery is rated to give one ampere for fifty hours. A 60-ampere hour battery is rated to give one ampere for sixty hours and a 100-ampere hour battery is rated to give one ampere for one hundred hours.

A Few Dont's in Connection with Storage Batteries

Don't allow your wires to become water or oil-soaked, as short-circuiting will probably result.

Don't screw down electrical connections with the fingers, as a tight joint can not be made in this way. Use pliers.

Don't start out knowing your battery is nearly exhausted, as it may run all right to start with, but will probably go out of business at a most inopportune time and place.

Don't fail to inspect battery connections regularly, as they are liable to work loose, and current losses will be the result.

For additional data on the care of Storage Batteries see "General Information" section.



STORAGE BATTERIES

Eveready Non-Sulphating Storage Batteries



Automobile Starting Type



Automobile Ignition Type



Automobile Lighting Type

Contrary to practice with other storage batteries the use of Eveready Non-Sulphating Storage Batteries eliminates all special attention and care. No regular periodic recharges necessary while not in service, to prevent sulphation. No over-charges needed to reduce sulphate. No injury in leaving battery discharged for any length of time. No limitation in discharging to a certain voltage per cell.

No taking battery apart and washing plates when the battery is not used for an extended period.

No special attention during winter months if battery is not used.

No buckling or warping of plates on heavy discharges.

Each Eveready Storage Battery is guaranteed in a definite form as to life and to be non-sulphating. Ignition and lighting types are guaranteed for three (3) years, starting types for eighteen (18) months. In addition to the lighting and ignition types listed below, Starting batteries of all types are also available. Full information furnished on request.

Automobile Ignition Types

TYPE NUMBER	STOCK NUMBER	VOLTS	AMPERE HOUR CAPACITY AT		WEIGHT, Pounds	OUTSIDE DIMENSIONS, Inches			EACH
			5 Ampere Discharge Rate	1 Ampere Discharge Rate		Length	Width	Height	
6V40R	801	6	20	40	18	4 1/4	7 1/4	8 3/4 Each D.P. \$16.65	\$12.50
4V60R	802	4	35	60	16	3 3/4	7 1/4	8 3/4 Each D.P. \$17.75	13.25
6V60R	803	6	35	60	23	5 1/4	7 1/4	8 3/4 Each D.P. \$23.86	17.80
8V60R	804	8	35	60	30	7 1/2	7 1/4	8 3/4 Each D.P. \$29.97	22.35
6V80R	805	6	45	80	28	7	7 1/4	8 3/4 Each D.P. \$26.63	20.00

Automobile Lighting Types (6 Volt)

Type No.	Stock No.	BATTERY CAPACITY (PER SINGLE FULL CHARGE)								OUTSIDE DIMENSIONS, Inches			Weight Lbs.	Each
		AMPERE HOURS, CONTINUOUS DISCHARGE AT				HOURS CONTINUOUS BURNING WITH TOTAL LAMP LOAD OF								
		1 Ampere Discharge Rate	3 Ampere Discharge Rate	5 Ampere Discharge Rate	10 Ampere Discharge Rate	6 C.P. 1 Ampere Discharge Rate	18 C.P. 3 Ampere Discharge Rate	30 C.P. 5 Ampere Discharge Rate	60 C.P. 10 Ampere Discharge Rate	Length	Width	Height		
6L60R	826	110	81	70	60	110	27	14	6	9%	7%	9 1/4	40 Each D.P. \$26.64	\$24.00
6L80R	828	130	111	90	80	130	37	18	8	10 1/8	7%	9%	47 Each D.P. \$29.97	27.00
6L100R	830	150	125	110	100	150	42	22	10	12	7%	9%	54 Each D.P. \$33.30	30.00
6L120R	832	180	150	135	120	180	50	27	12	14%	7%	9%	66 Each D.P. \$36.63	33.00

Batteries above listed are assembled with wood separators only. Rubber separators included for an additional charge.



STORAGE BATTERIES

Eveready Non-Sulphating Storage Batteries—Automobile Starting Types

TYPE NUMBER	Stock No.	WEIGHT, Pounds	OUTSIDE DIMENSIONS, Inches			BATTERY CAPACITY (Per Single Full Charge)						Momentary Starting Rate— Ampere Discharge	EACH	
			Long	Wide	High	Ampere Hours Continuous Discharge at			Hours Continuous Burning with Total Lamp Load of					
						3 Ampere Rate	5 Ampere Rate	10 Ampere Rate	18 C.P.	30 C.P.	60 C.P.			
6-Volt Batteries														
6S80R	901	49	10%	7%	8%	105	95	80	35	19	8	250	\$33.00	
6S80H	902		10%	5%	10%									Each D. P. \$36.63
6S100R	903	60	12	7%	8%	126	110	100	42	22	9.5	300	\$39.00	
6S100H	904		12	5%	10%									Each D. P. \$43.30
6S120R	905	69	14%	7%	8%	160	140	120	53	28	12	350	\$43.00	
6S120H	906		14%	5%	10%									Each D. P. \$47.73
6S160R	907	80	17%	7%	8%	195	185	160	65	37	16	450	\$50.00	
6S160H	908		17%	5%	10%									Each D. P. \$55.50
6HS80R	909	55	10%	7%	9%	105	95	80	35	19	8	250	\$33.00	
												Each D. P. \$36.63		
6PS120R	910	70	14%	7%	8%	160	140	120	53	28	12	350	\$45.00	
												Each D. P. \$49.95		
6GD80S	911	62	9%	7%	11%	105	95	80	35	19	8	250	\$39.00	
												Each D. P. \$43.30		
6GD120S	912	80	11%	7%	11%	175	150	130	58	26	13	380	\$48.00	
												Each D. P. \$53.28		
12-Volt Batteries														
									1 1/2 Ampere Rate	2 1/2 Ampere Rate	5 Ampere Rate			
12S35R	931	58	12%	7%	8%	42	35	25	37	18.5	7	100	\$42.00	
12S35H	932		12%	5%	10 3/8%									Each D. P. \$46.62
12S50R	933	70	15	7%	8%	60	50	40	53	26.5	10	150	\$51.00	
12S50H	934		15	5%	10%									Each D. P. \$56.41
12S60R	935	82	17 3/8%	7%	8%	81	70	55	62	35.5	14	200	\$59.00	
12S60H	936		17 3/8%	5%	10%									Each D. P. \$65.50
12S80R	937	95	20%	7%	8%	105	95	80	93	46.5	19	250	\$66.00	
12S80H	938		20 1/4%	5%	10%									Each D. P. \$73.26
12S100R	939	112	23	7%	8%	126	110	100	112	55.5	22	300	\$72.00	
12S100H	940		23	5%	10%									Each D. P. \$79.92
16-Volt Batteries														
									1 1/2 Ampere Rate	2 1/2 Ampere Rate	5 Ampere Rate			
16S35R	961	75	16%	7%	8%	42	35	25	37	18.5	7	100	\$56.00	
16S35H	962		16%	5%	10%									Each D. P. \$62.16
16S50R	963	90	19%	7%	8%	60	50	40	53	26.5	10	150	\$68.00	
16S50H	964		19%	5%	10%									Each D. P. \$75.48
16S60R	965	105	23%	7%	8%	81	70	55	62	35.5	14	200	\$78.00	
16S60H	966		23%	5%	10%									Each D. P. \$86.58
18-Volt Batteries														
									1 1/2 Ampere Rate	2 1/2 Ampere Rate	5 Ampere Rate			
18S35R	981	85	20%	6%	9	42	35	25	37	18.5	7	100	\$63.00	
18S35H	982		15%	6%	10%									Each D. P. \$69.93
18S50R	983	102	20%	8%	9	60	50	40	53	26.5	10	150	\$76.00	
18S50H	984		15%	8%	10%									Each D. P. \$84.36
18S60R	985	122	20%	9%	9	81	70	55	62	35	14	200	\$87.00	
18S60H	986		15%	9%	10%									Each D. P. \$96.57

NOTE.—For lighting purposes one No. 12 neutral lighting wire is supplied on the 12-volt batteries for 3-wire, 6-volt lighting systems and on the 16-volt batteries for 3-wire, 8-volt systems. A 6-volt lighting lead is also supplied on the 18-volt batteries.

Outside dimensions given above represent the size of battery case, exclusive of handles. Lengths 1/2" longer with handles included.

Batteries listed are assembled with wooden separators only.

No. 2 Extra flexible rubber-covered terminal wires 18" long are used on 6-volt sizes.

No. 4 Extra flexible rubber-covered terminal wires 18" long are used on 12, 16 and 18-volt sizes.

No. 0 Extra flexible terminal wires instead of No. 2 can be had on 6-volt batteries at 25c net.

Additional wire: No. 0, 27c per ft. net. No. 2, 21c per ft. net. No. 4, 12c per ft. net.

Batteries of special sizes and capacities to order.



HYDROMETERS

Storage Battery Hydrometer

A Battery Hydrometer is a gauge for determining the state of the charge in a storage battery. By its use the exact strength of batteries is known and the inconvenience by exhausted batteries is overcome.

STRENGTH AND INDICATIONS

If battery fully charged reads 1250 on hydrometer, then the various readings would indicate battery strength of the percentage shown below:

1250 indicates.....	100 per cent.
1225 indicates.....	80 per cent.
1200 indicates.....	60 per cent.
1175 indicates.....	40 per cent.
1150 indicates.....	20 per cent.
1125 exhausted.....	00 per cent.

See that Hydrometer floats freely in solution before taking reading. This is important.



No. 1023 Battery Hydrometer. Beame and specific gravity scale 1100 to 1300 Specific Gravity one degree graduation. Length about 4½ inches over all, shot weighted. In flannel bag with test jar packed in wood box, each.....\$0.75
Each..D.P. \$0.44 Dozen..D.P. \$4.44

Hydrometer Syringes



No. 2 Hydrometer Syringe. Heavy glass cylinder with ground ends to insure accurate fit of the rubber stoppers.

Large rubber bulb is connected at top with hard rubber fitting. Hard rubber fitting and flexible rubber tube connect glass nipple at bottom. Capacity of cylinder about three ounces.

Hydrometer Scale, 1100 to 1350, Specific Gravity. Complete in wood box, each.....\$1.50
Each..D.P. \$2.44 Dozen..D.P. \$26.66

No. 3 Hydrometer Syringe. Heavy glass cylinder, with small suction bulb attached direct to glass cylinder. Flexible rubber tube attached to cylinder at the bottom.

Hydrometer Scale, 15 to 35, Beame and 1100 to 1300 Specific Gravity. Complete in pasteboard box, each.....\$1.00
Each..D.P. \$1.66 Dozen..D.P. \$17.33

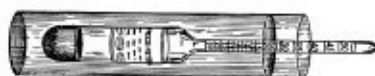
HYDROMETERS

Gasoline Hydrometer



No. 2064 Gasoline Hydrometer. Printed Scales, Beame 60 to 80, 1 degree graduation, length about 5 inches over all, shot weighted. In flannel bag with test jar in wood box, each.....\$0.60
Each..D.P. \$0.44 Dozen..D.P. \$4.44

Alcohol Freez-Meter



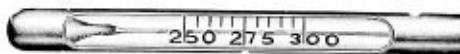
No. 2 Freez-Meter. An instrument which shows the exact temperature at which denatured alcohol and water will freeze, each.....\$1.00
Each..D.P. \$0.66 Dozen..D.P. \$6.66

TO TEST SOLUTION WITH FREEZ-METER

Take a quantity of the solution, sufficient to float the Freez-Meter in the test jar, supplied with each instrument, and read the line on the stem to which it sinks. This point will show the degree at which the tested solution will freeze. Temperature of solution to be 60 degrees Fahrenheit when the test is made.

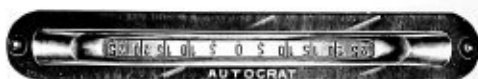
The following formulas will prove helpful: 20 per cent. solution (1 quart denatured alcohol added to 1 gallon of water) freeze about 10 degrees F. above zero. 30 per cent. solution (1½ quarts of denatured alcohol added to 1 gallon of water) freeze about 5 degrees F. below zero. 40 per cent. solution (2½ quarts of denatured alcohol added to 1 gallon of water) freeze about 20 degrees F. below zero. 50 per cent. solution (4 quarts of denatured alcohol added to 1 gallon of water) freeze at about 35 degrees F. below zero.

Thermometers—For Vulcanizers



No. 55 Nickel Plated case, 2½ inches long; will fit any vulcanizer, thermometer registers 300 degrees F.\$1.00
Each..D.P. \$0.77 Dozen..D.P. \$8.88

Grade Indicator



No. 70. A fine instrument for indicating the grade; registers with absolute accuracy the degree ascending or descending; nickel plated.....\$2.50
Each..D.P. \$1.88 Dozen..D.P. \$20.00



CABLE

Packard Ignition Cables



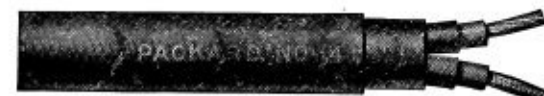
Packard Combination Low Tension Cable; standard for all kinds of low tension service. Color, brown. Diameter, 3/16 in. Per foot.....\$.10
Less than 100 ft. Per foot..D.P. \$.11
Per 100 ft.D.P. 10.55



Packard Combination High Tension Magneto Cable; designed especially for magnetos equipped with small terminals. Diameter, 5/16 in.; but the quality is unexcelled. Color, brown. Per foot..... .20
Less than 100 ft. Per foot..D.P. \$.22
Per 100 ft.D.P. 21.10



Packard Combination High Tension Cable; suitable for all forms of high tension service. This is easily the most popular size. Color, brown. Diameter, 1 in. Per foot..... .20
Less than 100 ft. Per foot..D.P. \$.22
Per 100 ft.D.P. 21.10



Packard Combination Low Tension Cable, 2 strand. Particularly adapted to single and two-cylinder engines. Replaces two single cables. Diameter, 7/16 in. Per foot..... .22
Less than 100 ft. Per foot..D.P. \$.24
Per 100 ft.D.P. 23.22



Packard Combination Low Tension Cable, 3 strand. An excellent cable for two-cylinder engines; also for wiring a double set of batteries. Diameter, 1 in. Per foot..... .35
Less than 100 ft. Per foot..D.P. \$.38
Per 100 ft.D.P. 36.93



Packard Combination Low Tension Cable, 4 strand. Admirably adapted to wiring 4-cylinder engines from coil to timer. Diameter, 1 in. Per foot..... .44
Less than 100 ft. Per foot..D.P. \$.48
Per 100 ft.D.P. 46.44

CABLE

Packard Electric Lighting Cables



No. 14. One-strand Packard Combination Electric Lighting Cable. Recommended for wiring tail and side lamps. Color, brown. Diameter, 3/16 in. Per foot...\$.10
Less than 100 ft. Per foot..D.P. \$.11
Per 100 ft.D.P. 10.55



No. 14. Two-strand Packard Combination Electric Lighting Cable. Recommended for wiring tail and side lamps. Diameter, 7/16 in. Very popular. Color, brown. Per foot..... .22
Less than 100 ft. Per foot..D.P. \$.24
Per 100 ft.D.P. 23.22



No. 12. One-strand Packard Combination Electric Lighting Cable. Recommended for wiring small head lamps. Color, brown. Diameter, 7/32 in. Per foot... .11
Less than 100 ft. Per foot..D.P. \$.12
Per 100 ft.D.P. 11.66



No. 12. Two-strand Packard Combination Electric Lighting Cable. Recommended for wiring head lamps where a two-conductor cable is desired. Color, brown. Diameter, 1/2 in. Per foot..... .24
Less than 100 ft. Per foot..D.P. \$.27
Per 100 ft.D.P. 25.33



No. 10. One-strand Packard Combination Electric Lighting Cable. Recommended for wiring from generator to battery and battery to switches. Also for wiring large head lamps. Color, brown. Diameter, 1 in. Per foot..... .13
Less than 100 ft. Per foot..D.P. \$.13
Per 100 ft.D.P. 12.66



No. 10. Two-strand Packard Combination Electric Lighting Cable. Recommended for wiring from generator to battery and from battery to controlling switches. Also used to wire head lamps which are of large size. Color, brown. Diameter, 1 in. Per foot..... .26
Less than 100 ft. Per foot..D.P. \$.29
Per 100 ft.D.P. 27.44



THE GIBSON COMPANY

INDIANAPOLIS



CABLE

Gibson Quality Cable

Gibson Quality Cable is used by the foremost car manufacturers in America. Garage and repair men have found it the best obtainable for lighting and ignition purposes; it is also ideal for electric starting and lighting systems.

This cable is manufactured in the largest plant in America devoted exclusively to the production of wire and wire products. None but the highest grade materials is used in its construction. The insulating materials are selected for their resistance to weather, moisture and chafing. The wires are of the very best electrolytic copper and have great carrying capacity with minimum resistance.

Every dealer should carry a stock of this cable; the demand is constant, and when overhauling cars or equipping them electrically this Gibson Quality Cable will be found the best obtainable for the purpose.



- G. Q. Low Tension Braided Cover Cable, 3/16 Diameter, per foot**..... .08
Less than 100 ft., per ft., D.P. \$.053
Per 100 ft..... D.P. 4.44
- G. Q. Magneto Braided Cover Cable, 5/16 Diameter, per ft.** .15
Less than 100 ft., per ft., D.P. \$.15
Per 100 ft..... D.P. 12.22
- G. Q. High Tension Braided Cover Cable, 7/16 Diameter, per foot**..... .20
Less than 100 ft., per ft., D.P. \$.17
Per 100 ft..... D.P. 14.44



- G. Q. Low Tension Braided Cover Cable, two-strand, 7/16 Diameter, per foot**..... .15
Less than 100 ft., per ft., D.P. \$.15
Per 100 ft..... D.P. 14.00
- G. Q. Low Tension Braided Cover Cable, three-strand, 7/16 Diameter, per foot**..... .25
Less than 100 ft., per ft., D.P. \$.20
Per 100 ft..... D.P. 18.00
- G. Q. Low Tension Braided Cover Cable, four-strand, 3/4 Diameter, per foot**..... .35
Less than 100 ft., per ft., D.P. \$.22
Per 100 ft..... D.P. 20.00



- G. Q. Rubber Covered Low Tension Cable, 3/16 Diameter, per foot**..... .10
Less than 100 ft., per ft., D.P. \$.053
Per 100 ft..... D.P. 5.00
- G. Q. Rubber Covered Magneto Cable, 1/2 Diameter, per foot**..... .15
Less than 100 ft., per ft., D.P. \$.11
Per 100 ft..... D.P. 10.00
- G. Q. Rubber Covered Magneto Cable, 9/32 Diameter, per foot**..... .18
Less than 100 ft., per ft., D.P. \$.15
Per 100 ft..... D.P. 14.00
- G. Q. Rubber Covered High Tension Cable, 3/4 Diameter, per foot**..... .20
Less than 100 ft., per ft., D.P. \$.20
Per 100 ft..... D.P. 18.00



- G. Q. Lighting Braided Cover Cable, one-strand, 3/16 Diameter, No. 11, per foot**..... .07
Less than 100 ft., per ft., D.P. \$.053
Per 100 ft..... D.P. 4.44
- G. Q. Lighting Braided Cover Cable, two-strand, 7/16 Diameter, No. 11, per foot**..... .15
Less than 100 ft., per ft., D.P. \$.15
Per 100 ft..... D.P. 11.00
- G. Q. Lighting Braided Cover Cable, one-strand, 1/2 Diameter, No. 12, per foot**..... .10
Less than 100 ft., per ft., D.P. \$.063
Per 100 ft..... D.P. 6.00
- G. Q. Lighting Braided Cover Cable, two-strand, 1/2 Diameter, No. 12, per foot**..... .20
Less than 100 ft., per ft., D.P. \$.163
Per 100 ft..... D.P. 15.00

CABLE

Gibson Quality Lamp Cords



- No. 18. Old Code Flexible Lamp Cord, per foot**..... \$.06
Less than 100 ft., per ft., D.P. \$.034
Per 100 ft..... D.P. 2.77

- No. 18. New Code Flexible Lamp Cord, per foot**..... .07
Less than 100 ft., per ft., D.P. \$.044
Per 100 ft..... D.P. 4.00

- No. 16. New Code Flexible Lamp Cord, per foot**..... .08
Less than 100 ft., per ft., D.P. \$.054
Per 100 ft..... D.P. 4.40

- No. 18. New Code Flexible Lamp Cord, Braided Silk Cover, per foot**..... .10
Less than 100 ft., per ft., D.P. \$.064
Per 100 ft..... D.P. 6.00



- No. 18. Brewery Cord. Each conductor is made up of a copper wire strand insulated with code thickness rubber, covered with a cotton braid and saturated with weatherproof compound having polished finish; two such conductors are then twisted into pairs, forming a flexible cord. Per foot**..... .10
Less than 100 ft., per ft., D.P. \$.064
Per 100 ft..... D.P. 6.00



- No. 18. Packing House Cord, consists of two conductors stranded, rubber insulated, twisted together with jute filler and finished with two weatherproof braids. Per foot**..... .10
Less than 100 ft., per ft., D.P. \$.09
Per 100 ft..... D.P. 8.00



- No. 18. Canvasite Cord. This consists of regular New Code twisted cotton-covered lamp cord, braided over all with one cotton braid saturated with weatherproof compound then waxed and polished. Per foot**..... .10
Less than 100 ft., per ft., D.P. \$.09
Per 100 ft..... D.P. 8.00

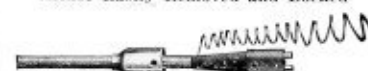


- No. 18. Re-enforced Portable Cord consists of two-conductor new code lamp cord with seamless rubber jacket and finished with a weatherproof glazed cotton or silk braid. Per foot**..... .10
Less than 100 ft., per ft., D.P. \$.09
Per 100 ft..... D.P. 8.00

Brass Armored Lighting Cable



Armor Easily Removed and Locked



Connection Made to Fitting and Armor Ready to Be Replaced

- To meet the demand for a serviceable cable for low-tension automobile lighting which is moisture-proof, oil-proof and suitably protected to withstand the hard usage encountered, we have developed an extra flexible multiple conductor cable in the sizes listed. The conductors are suitably insulated, twisted together and finished over all with a strong braid. The cable is then compounded and finished with a half-round brass wire armor for mechanical protection.
- No. 1. Single Conductor Lighting Cable, with brass armor, 3/16 Diameter. Per foot**..... .10
Less than 100 ft., per ft., D.P. \$.11
Per 100 ft..... D.P. 10.00
- No. 2. Double Conductor Lighting Cable, with brass armor, 5/16 Diameter. Per foot**..... .20
Less than 100 ft., per ft., D.P. \$.19
Per 100 ft..... D.P. 16.00



CABLE

Starter Cable



No. 0 Extra Flexible Starter Cable (19x17x.0179 tinned copper wires), 5/64 Rubber Old Code, finished with a tape and a weatherproof braid. Per foot\$0.50
Diameter 11/16 inch.

Less than 100 feet, per foot..D.P. \$0.55
Per 100 feet..D.P. \$50.00

No. 1 Extra Flexible Starter Cable (7x37x.0179 tinned copper wires), 5/64 Rubber Old Code, Tape and Braid. Per foot..... .40
Diameter 3/8 inch.

Less than 100 feet, per foot..D.P. \$0.44
Per 100 feet..D.P. \$40.00

No. 2 Extra Flexible Starter Cable (7x30x.0179 tinned copper wires), 1/16 Rubber Old Code, Tape and Braid. Per foot..... .35
Diameter 1/2 inch.

Less than 100 feet, per foot..D.P. \$0.40
Per 100 feet..D.P. \$36.00

Flexible Metallic Conduit



This is the best wire protector especially on cars where there is much friction.

Flexible Metal Conduit, 5/16 I. D. Per foot.....\$0.12
Per foot..D.P. \$0.09

Flexible Metal Conduit, 1/2 I. D. Per foot..... .15
Per foot..D.P. \$0.10

Flexible Metal Conduit, 7/16 I. D. Per foot..... .18
Per foot..D.P. \$0.13

Flexible Metal Conduit, 1 I. D. Per foot..... .20
Per foot..D.P. \$0.15 1/2

Blake Fibre Insulated Staples



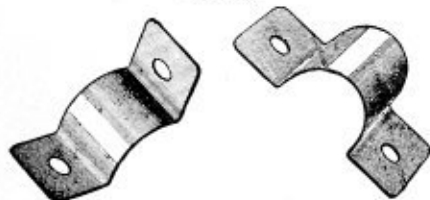
1/2-inch 3/4-inch 1-inch
Insulated Staples

No. 1 Blake Staples, per 100.....\$0.45
Per 100..D.P. \$0.44

No. 3 Blake Staples, per 100..... .45
Per 100..D.P. \$0.44

No. 6 Blake Staples, per 100..... .50
Per 100..D.P. \$0.55

Cleats



Tubing and Wire Cleats, all sizes, per dozen.....\$0.10
Per 100..D.P. \$1.32

CONNECTORS

Electric Wire Connectors



No. 1. Plain Connectors with soldered terminals, 1/2-inch, each.....\$0.25
Each..D.P. \$0.26 Per dozen..D.P. \$2.66

No. 2. Plain Connectors with soldered terminals, 3/4-inch, each..... .35
Each..D.P. \$0.28 Per dozen..D.P. \$3.10

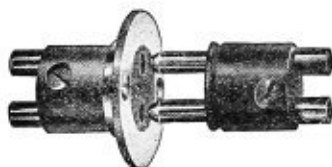
No. 3. Plain Connectors with screw terminals, 1/2-inch, each..... .30
Each..D.P. \$0.32 Per dozen..D.P. \$3.55

No. 4. Plain Connectors with screw terminals, 3/4-inch, each..... .40
Each..D.P. \$0.35 Per dozen..D.P. \$3.88



No. 5. Flanged Connectors with soldered terminals, 1/2-inch, each..... .35
Each..D.P. \$0.50 Per dozen..D.P. \$5.34

No. 6. Flanged Connectors with soldered terminals, 3/4-inch, each..... .45
Each..D.P. \$0.52 Per dozen..D.P. \$5.55



No. 7. Flanged Connectors with screw terminals, 1/2-inch, each..... .40
Each..D.P. \$0.55 Per dozen..D.P. \$6.10

No. 8. Flanged Connectors with screw terminals, 3/4-inch, each..... .50
Each..D.P. \$0.60 Per dozen..D.P. \$6.66



No. 6501. Manhattan rubber covered Connectors, 1/2-inch, each..... .25
Each..D.P. \$0.26 Per dozen..D.P. \$2.88

No. 6502. Manhattan rubber covered Connectors, 3/4-inch, each..... .30
Each..D.P. \$0.35 Per dozen..D.P. \$3.88



SOCKETS



No. 107 Plain Socket, nickeled, twin wire, each...\$0.35
Each...D.P. \$0.28 Per dozen...D.P. \$3.00

No. 121 Plain Socket, nickeled, single wire, each... .35
Each...D.P. \$0.28 Per dozen...D.P. \$3.00



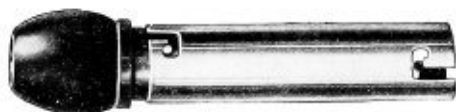
No. 101-P Plain Socket, nickeled, twin wire, each... .50
Each...D.P. \$0.48 Per dozen...D.P. \$5.30

No. 115-P Plain Socket, nickeled, single wire, each... .50
Each...D.P. \$0.48 Per dozen...D.P. \$5.30



No. 108-C Plain Socket, nickeled, twin wire, each... .45
Each...D.P. \$0.38 Per dozen...D.P. \$4.10

No. 122-C Plain Socket, nickeled, single wire, each... .45
Each...D.P. \$0.38 Per dozen...D.P. \$4.10



No. 104-C Plain Socket, nickeled, twin wire, each... .65
Each...D.P. \$0.60 Per dozen...D.P. \$6.66



No. 5 Double End Socket, each... .45
Each...D.P. \$0.33 Per dozen...D.P. \$3.33



No. 6 Double End Socket, Switch Type, each.... .48
Each...D.P. \$0.35 Per dozen...D.P. \$3.66

CONNECTORS



No. 201-P Plain Connector, nickeled, twin wire, each...\$0.40
Each...D.P. \$0.48 Per dozen...D.P. \$5.33

No. 209-P Plain Connector, nickeled, single wire, each... .40
Each...D.P. \$0.48 Per dozen...D.P. \$5.33



No. 202-C Plain Connector with cap, nickeled, twin wire, each... .50
Each...D.P. \$0.55 Per dozen...D.P. \$6.00

No. 210-C Plain Connector with cap, nickeled, single wire, each... .50
Each...D.P. \$0.55 Per dozen...D.P. \$6.00



No. 221-C Plug and cap with shoulder, twin wire, each... .25
Each...D.P. \$0.27 Per dozen...D.P. \$3.00

No. 207-P Metal Dash Connector, nickeled, twin wire, each... .70
Each...D.P. \$0.66 Per dozen...D.P. \$7.22

No. 215-P Metal Dash Connector, nickeled, single wire, each... .70
Each...D.P. \$0.66 Per dozen...D.P. \$7.22



No. 208-C Metal Dash Connector with cap, nickeled, twin wire, each... .80
Each...D.P. \$0.66 Per dozen...D.P. \$7.22

No. 216-C Metal Dash Connector with cap, nickeled, single wire, each... .80
Each...D.P. \$0.66 Per dozen...D.P. \$7.22



No. 205-C Wood Dash Connector with cap, nickeled, twin wire, each... .65
Each...D.P. \$0.60 Per dozen...D.P. \$6.66

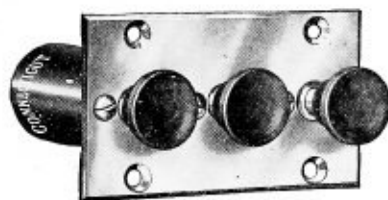
No. 213-C Wood Dash Connector with cap, nickeled, single wire, each... .65
Each...D.P. \$0.60 Per dozen...D.P. \$6.66





SWITCHES

Connecticut Lighting Switches



Three Gang Type "N" Lighting Switch

This is a neat, simple and easily installed switch. All that is necessary is to bore a circular hole, or in case of a multiple gang switch, holes with $\frac{1}{2}$ inch centers.

The body of each unit is made of a material that will resist most intense heat, and also may be subjected to rough usage.

Type N Single Gang Lighting Switch. Size $1\frac{1}{2}$ high by 1 inch wide, each.....\$0.50

Each..D.P. \$0.66

Type N Two Gang Lighting Switch. Size $1\frac{1}{2}$ high by $1\frac{1}{2}$ inches wide, each.....\$1.00

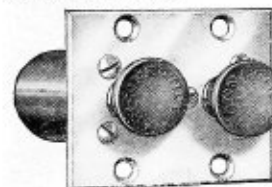
Each..D.P. \$1.33

Type N Three Gang Lighting Switch. Size $1\frac{1}{2}$ high by $2\frac{1}{4}$ inches wide, each.....\$1.50

Each..D.P. \$2.00

Type N Four Gang Lighting Switch. Size $1\frac{1}{2}$ high by $3\frac{1}{2}$ inches wide, each.....\$2.00

Each..D.P. \$2.66



Front View of Type "S" Switch

Type "S"

A two gang switch where one button controls head and tail with one movement and another button controls side and tail.

Type S Lighting Switch, each.....\$1.25

Each..D.P. \$1.88

Type "RT"

A two gang switch where one button puts on and turns off all the lights on the car, and the position of the second button (whether it is pulled out or pushed in) selects as follows:

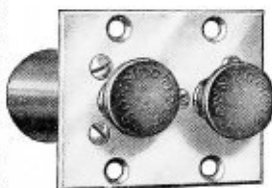
In the case of double filament head lights, whether the bright or dim filaments shall burn with the tail light.

In the case of two bulb headlights, whether the large or small bulbs shall burn with the tail light.

In the case of head and side lights to be operated separately, whether the head or side lights shall burn with the tail light.

Type RT Selector Switch, each.....\$1.25

Each..D.P. \$1.88



Type "RT" Selector Switch.

Primarily for lighting as pulling out the button closes an individual circuit and pushing it in opens the circuit. Multiple gang switches have a common bus bar for the battery wires.

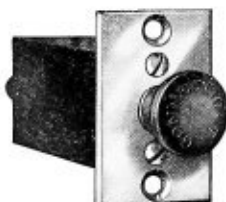


Single Gang Type "N" Switch.

SWITCHES

Connecticut Dimming Switches

Type "D"



Type "D" Dimming Switch

This is a series dimming switch and is made square instead of round as on the other lighting switches. Its dimensions are $\frac{1}{2}$ inch square by $1\frac{1}{2}$ inches deep. The mounting plate is the same size as the other switches so that they may be mounted side by side.

This switch has no "Off" position, but must be used in conjunction with another switch controlling the circuit. When the button is in, the lights are in multiple and bright, while when the button is out, they are in series and dim.

Type D Dimming Switch, each.....\$0.75

Each..D.P. \$1.22

Connecticut Switches

Type "L"

This is a lock type switch with removable lever. Lever made of spring bronze, insuring positive contact. Back edge protected with soft rubber gasket to prevent penetration of water.



Type "L" Lever Switch

Type L Connecticut Lever Switch, each.....\$0.75

Each..D.P. \$1.22

Type "P"



Type "P" Plug Switch

Absolutely waterproof. Protected by soft rubber gasket fitted to the back of switch. Center plug used for holder of plug when switch is not in use.

Type P Connecticut Plug Switch, each.....\$0.75

Each..D.P. \$1.22

MB Kick Switch

Type MB Connecticut Flush Dash Kick Switch is a four-position switch arranged for controlling two sets of ignition where a battery is used as one system and closed circuit magneto as the other. First position is off, second position throws the battery into circuit, third position throws the battery and magneto in together and the fourth position throws the magneto into circuit only.



MB Kick Switch

Type MB Connecticut Kick Switch, each.....\$1.50

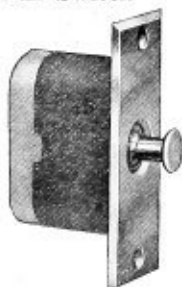
Each..D.P. \$2.77



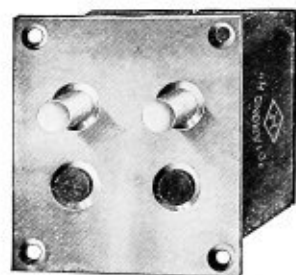
SWITCHES

Cutler-Hammer Push and Pull Switch

The Push and Pull Switch, while designed primarily for automobile service, may be used on low voltages wherever a small, compact switch is desired. In spite of its small size it has a larger current-carrying capacity than any other switch of its class, being rated at 10 amperes at 80 volts. It operates with an absolutely quick "make and break."



- No. 7160 Single Switch, complete with plate, each.....\$0.80
Each..D.P. \$0.93
- No. 7172 Gang of 2 switches, complete with plate, each.....1.60
Each..D.P. \$1.86
- No. 7173 Gang of 3 switches, complete with plate, each.....2.40
Each..D.P. \$2.79
- No. 7174 Gang of 4 switches, complete with plate, each.....3.20
Each..D.P. \$3.72



Showing No. 32-2 Series

- No. 33. 3 Series Flush Push Button Switch, each. 2.25
Each..D.P. \$2.31
- No. 34. 4 Series Flush Push Button Switch, each. 3.00
Each..D.P. \$3.08

Acme Switch

This is a high grade, rubber base switch, for any purpose where a switch is to be used for controlling electric circuits such as for automobile, motor boat, stationary engine, electric lighting and for innumerable other purposes. It has a strong base, phosphor bronze lever; heavy contacts and rubber button. A classy article. Nickel-plated.



- No. 1. Acme Switch, each.....\$0.50
Each..D.P. \$0.53 Dozen..D.P. \$5.33
- Levers for Acme Switches, each...15
Each..D.P. \$0.15 Dozen..D.P. \$1.44

Kingston 1915 Switch

The Kingston 1915 Switch is made of rubber composition, of goodly proportion. It will withstand the severe service of a kick switch if so desired. The contacts are of the knife kind—the most positive known to the electric trade today. It is constructed for battery and either high or low tension magneto service; in fact, may be used by any two-current sources desired. The key is of the lock type, and nothing except the key can be used to operate it.

- 1915 Kingston Switch, each...\$1.25
Each..D.P. \$2.00



SWITCHES

Splitdorf Switch

The Splitdorf is a well-known reliable switch. By pulling the plug out when leaving the machine you stop all chances of having the current turned on and probably your car stolen.

Can be used with two sets of batteries or one set and dynamo.



- No. 905 Splitdorf Switch, each.....\$1.00
Each..D.P. \$1.66

Enclosed Type of Splitdorf Switch



This new model Splitdorf Switch is constructed on the principle of the standard model, except all working parts are enclosed, making the switch absolutely waterproof. It can not short-circuit.

- No. 598. Splitdorf Switch, each.....\$1.25
Each..D.P. \$2.10

Splitdorf Kick-Off Switch

This Switch is of the double pole cut-out type and has the advantage of having all the metal parts enclosed, so that there is no possibility of a short circuit from the outside. Can be used with two sets of batteries or one set of batteries and magneto. It is fitted with a long lever which can be operated by the foot. It also includes push button feature, which enables the operator of the car to start his motor without cranking, providing of course the motor is properly balanced and holds compression.



- No. 1928 Splitdorf Kick-Off Switch, each.....\$4.00
Each..D.P. \$6.66

Heinze Kick-Off Switch

- Price, each.....\$2.00
Each..D.P. \$3.33



No. E16 B



SWITCHES

Floor Switches



No. 400. Floor Horn Push Switch, each\$0.70
Each, D.P. \$1.11



No. 417

Dash Plug Switch

No. 417. Dash Plug Switch, each\$0.50
Each, D.P. \$0.77



No. 973

Oblong Push Button

No. 973. Oblong Push Button Switch, each \$0.50
Each, D.P. \$0.77

Tip-Top Push Buttons



Flush Type Mounting



Fore-Door Mounting

Three outstanding features characterize the Benjamin Tip-Top Button: (1) Instead of having a small door bell push button which is always hard to locate, its top has a diameter of 1 1/2 inches; (2) this top as a whole is the moving element, so designed that a touch on any portion causes the circuit to be closed; (3) it is practically self-cleaning, and cannot get out of order.

Tip-Top Push Button, Fore-Door type, each\$0.60
Each, D.P. \$0.88 Dozen, D.P. \$9.60

Tip-Top Push Button, Flush type, each60
Each, D.P. \$0.88 Dozen, D.P. \$9.60

Steering Wheel Type



Steering Wheel Mounting

Used on the steering wheel, the Tip-Top Button should be placed with its edge about 1/4 of an inch from the rim on the right hand side, so that its top is within easy reach of the thumb. When the edge of the button is touched, its top tips downward, the contact is closed within the case, and the circuit completed to the horn. As is often necessary, e. g., in turning corners, the button must be operated when the wheel is not in a straight-ahead position. In this case all the operator has to do is to drop either hand on the button.

Tip-Top Push Button, Steering Wheel type, each ...\$0.60
Each, D.P. \$0.88 Dozen, D.P. \$9.60

Push Buttons



No. 1179. Steering Spider Push Button, with shallow bracket for use on steering wheel spider, price, each\$0.60
Each, D.P. \$0.44 Dozen, D.P. \$4.44

No. 1178. Steering Post Push Button, with range from 1 1/4 to 2 inches clasp diameter; diameter of face 2 1/4 inches; height over all 2 1/4 inches, price, each\$0.60
Each, D.P. \$0.44 Dozen, D.P. \$4.44

No. 7 Samson Horn Cable Protector

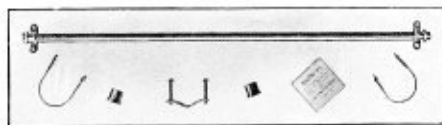


Consisting of 36-inch Flexible Brass Tubing, 2 Spring Tension Holders, 1 Floor Bushing; neat and simple.

To install, wrap cable around spoke of wheel twice—fish through flexible tube—attach one holder at top and other near bottom around post and tube. Drill an inch hole in floor for bushing. If post is small take up some of spring in holders and cut off.

Price, outfit\$1.50
Each, D.P. \$2.22

Rexo Steering Column Fixture



This outfit consists of neat metal tubular protection for the cord where it runs down the steering column, including adjustable clamps for securely fastening the same in place, also bushing for protecting the cord where it leads through the foot board and side of car, and special clamp for attaching the button to one of the spokes of the steering wheel.

The above fixtures make it possible to mount the Rexo Button so that it will always be under the thumb, and so as to be quickly operated in case of emergency.

Complete outfit as above, price\$1.50
Each, D.P. \$2.00



POCKET METERS

"Eveready" Meters



No. 1002. "Eveready"
Ammeter for reading
current in amperes;
registers 0 to 35, each \$1.25
Each... D.P. \$1.66
Dozen... D.P. 18.66

No. 1003. "Eveready"
Volt Ammeter for
reading current in
both volts and am-
peres; registers 0 to 35
amperes; 0 to 14 volts,
each \$2.00

Each... D.P. \$2.22
Dozen... D.P. 24.00



No. 1005. "Eveready"
Volt Meters for read-
ing current in volts;
registers 0 to 10 volts,
each \$1.75
Each... D.P. \$2.00
Dozen... D.P. 21.33

Connecticut Meters

Supplied to register voltage and am-
perage, or combination of both. Very
thorough workmanship and accurate.
Made on the Dead Beat Principle with
jeweled bearing, fitted with etched sil-
ver dial with scale in raised black.
Temperature or dampness will not in-
terfere with accuracy.



Volt Ammeter

Volt Ammeters

No. 802. 0-30 amp. 0-8 volts \$3.00
Each... D.P. \$5.00

No. 802. 0-30 amp. 0-15 volts 4.00
Each... D.P. \$6.66

Ammeters

No. 803. 0-30 amp. 2.75

Volt Meters

No. 804. 0-3 volts in 1-10 div 2.75

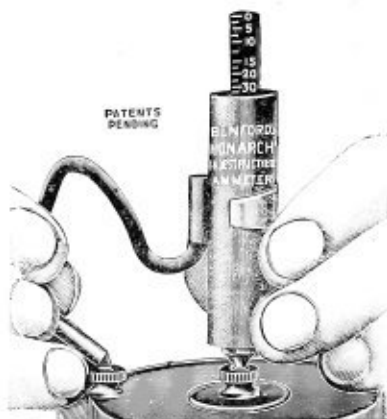
No. 805. 0-8 volts 2.75
Each... D.P. \$4.60

No. 806. 0-15 volts 3.50
Each... D.P. \$5.82

Leather Cases, extra50
Each... D.P. \$0.84

AMMETERS AND GAUGES

Benford's Monarch Indestructible Ammeter



Showing How to Test, Using Contact Furnished with Ammeter

Benford's Monarch Indestructible Ammeter will ac-
curately test the amperage of a dry cell up to thirty
amperes, and will not lose its efficiency through rough
handling. When not in use, the cap must be kept on
tight. There is a possibility of damage to the tongue
without the cap on, but when it is on the Ammeter is
indestructible.

Each \$1.00
Each... D.P. \$1.32 Dozen... D.P. \$13.20

Oil and Gasoline Gauge



No. 10 Low Pressure Dash Gauge for oil or gaso-
line, two-inch nickered with back connection and
flange in front. Registers ten pounds, each \$3.00
No. 12 Low Pressure Dash Gauge for oil or gaso-
line, two-inch nickered with bottom connections
and flange in back. Registers ten pounds, each 3.00
Each... D.P. \$4.11

Compressometer

This instrument is absolutely
necessary in testing cylinders for
leaky valves, etc. By its use one
can readily determine the exact
compression in pounds in each
cylinder and make comparisons.



Compressometer, Nickered-Plated, 2 1/2 inches over
all, three bushings furnished with each one,
1/4-inch, 3/8 and metric, each \$4.00
Each... D.P. \$6.11



AUTOMOBILE TYPE INSTRUMENTS

A great many automobile starting and lighting systems are not provided with instruments, and the car operator is unable to determine whether the storage battery is properly charging and discharging. EVER-READY Automobile Type Instruments are especially recommended for this service, as they are highly accurate, not affected by vibration, and are reasonable in price. Standard finish models 63, 64 and 67—Nickel, Dead Black Enamel, Brass, Copper or Gun Metal to order, no extra charge; Models 69 and 70—Dead Black Enamel, Nickel, Brass, Copper or Gun Metal to order, no extra charge.

Ammeters



Representing Nos. 63 and 64

PRICE

Amp. Range	Model 63	Model 69
1-0-1 Each.....	\$6.00	Each.....\$7.50
Each..D.P.	\$10.00	Each..D.P. \$12.48
5-0-5 Each.....	\$6.50	Each.....\$8.00
Each..D.P.	\$10.85	Each..D.P. \$13.33
10-0-10 Each.....	\$7.00	Each.....\$8.50
Each..D.P.	\$11.66	Each..D.P. \$14.18
15-0-15 Each.....	\$7.50	Each.....\$8.50
Each..D.P.	\$12.48	Each..D.P. \$14.18
25-0-25 Each.....	\$8.00	Each.....\$9.50
Each..D.P.	\$13.33	Each..D.P. \$15.82
30-0-30 Each.....	\$8.50	Each.....\$9.75
Each..D.P.	\$14.18	Each..D.P. \$16.24
50-0-50 Each.....	\$9.00	Each.....\$10.00
Each..D.P.	\$15.00	Each..D.P. \$16.66

Volt Meters



Representing Nos. 69 and 70

PRICE

Volt Range	Model 64	Model 70
0-3 Each.....	\$6.50	Each.....\$8.50
Each..D.P.	\$10.85	Each..D.P. \$14.18
0-19 Each.....	\$7.00	Each.....\$9.00
Each..D.P.	\$11.66	Each..D.P. \$15.00
0-15 Each.....	\$7.50	Each.....\$9.50
Each..D.P.	\$12.48	Each..D.P. \$15.82
0-30 Each.....	\$8.00	Each.....\$10.00
Each..D.P.	\$13.33	Each..D.P. \$16.66
0-50 Each.....	\$8.50	Each.....\$10.25
Each..D.P.	\$14.18	Each..D.P. \$17.08

Duplex Volt Ammeter



Amp. Range	Model 67 Volt Range	PRICE
5-0-5 0-3 Each.....		\$14.50
Each..D.P.	\$24.18	
10-0-10 0-10 Each.....		\$15.50
Each..D.P.	\$25.82	
10-0-10 0-15 Each.....		\$16.00
Each..D.P.	\$26.66	
15-0-15 0-15 Each.....		\$16.50
Each..D.P.	\$27.50	
20-0-20 0-15 Each.....		\$16.75
Each..D.P.	\$27.93	
30-0-30 0-15 Each.....		\$17.00
Each..D.P.	\$28.33	
30-0-30 0-30 Each.....		\$17.25
Each..D.P.	\$28.76	
50-0-50 0-50 Each.....		\$17.50
Each..D.P.	\$29.16	

1015 Indicator



A low priced current indicator not quite so accurate as other instruments shown above, but sufficiently accurate for all practical purposes. Designed to meet the demand for a low priced indicating ammeter for automobile use. Standard finishes, Nickel, Black Enamel and Brass.

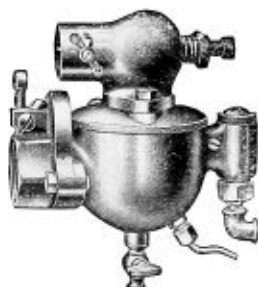
Amp. Range	PRICE
10-0-10 Each.....	\$1.50
Each..D.P.	\$2.48
*15-0-15 Each.....	\$1.50
Each..D.P.	\$2.48
30-0-30 Each.....	\$1.50
Each..D.P.	\$2.48

*Carried in stock in this range only.



CARBURETORS

Schebler Carburetors



Model D

The Model D is the original Schebler Carburetor, simple of adjustment and is especially adapted for marine motors, single or double opposed motors, stationary engines, and all motors where extreme low throttling conditions are not required. This carburetor is made standard with the shutter air valve in the 1-in. and 1½-in. sizes. The 1-in., 1½-in. and 2-in. sizes are standard with the flusher in the lid. If required other than standard, special instructions should be given on the order.

The air intake and throttle are interchangeable, and connections can be made to either vertical or horizontal manifolds.

Model D Schebler Carburetor, 1-in.	\$ 9.25
Each...D.P. \$14.44	
Model D Schebler Carburetor, 1½-in.	11.25
Each...D.P. \$16.66	
Model D Schebler Carburetor, 1-in.	12.00
Each...D.P. \$17.77	
Model D Schebler Carburetor, 1½-in.	12.75
Each...D.P. \$18.88	
Model D Schebler Carburetor, 1½-in.	16.50
Each...D.P. \$24.44	
Model D Schebler Carburetor, 2-in.	33.00
Each...D.P. \$48.88	

The Model H Carburetor is manufactured only in the 1-in. and 1½-in. sizes, and is designed for motorcycles and small high speed motors, where great flexibility and perfect control are required. The supply of gasoline is controlled by the cam, which gives an adjustment on low, intermediate and high speeds. An air bend is so attached to the constant air opening of this carburetor that it can be turned to any convenient angle in order to draw warm air off the cylinders. This air bend will be furnished plain, without shutter, unless specified to the contrary. Also locking device on air valve is furnished to insure easy starting.

In ordering this carburetor or parts, specify make of motorcycle for which they are required, as the different motorcycles require different cams, levers and bends.

Model H Schebler Carburetor, 1-in.	\$11.25
Each...D.P. \$16.66	
Model H Schebler Carburetor, 1½-in.	12.00
Each...D.P. \$17.77	

SPECIAL OUTFIT

Model H 1-inch Special with Manifold, complete for Indian, Twins or Singles, each	\$12.00
Each...D.P. \$17.77	
Model H 1½-inch Special with Manifold, complete for Thor, Indian, Twins or Singles, each	12.00
Each...D.P. \$17.77	

CARBURETORS

Schebler Carburetors

The Model L Carburetor is designed for the exacting needs of high speed motors where low throttling, rapid acceleration, maximum power and speed are required. It is the most improved type of lift needle carburetor and is so designed that the amount of fuel entering the motor is automatically controlled by means of a raised needle working automatically with the throttle. The adjustment or control of gasoline in this instrument can be adjusted for low, intermediate or high speed, each adjustment being independent and not affecting either of the other adjustments.

The Model L is furnished with a bend for connecting or taking warm air from around the exhaust manifold into the initial air opening of the carburetor by means of the hot air drum and tubing.

Model L Schebler Carburetor, 1-inch	\$13.50
Each...D.P. \$20.00	
Model L Schebler Carburetor, 1½-inch	15.00
Each...D.P. \$22.22	
Model L Schebler Carburetor, 1½-inch	18.75
Each...D.P. \$27.77	
Model L Schebler Carburetor, 1½-inch	22.50
Each...D.P. \$33.33	
Model L Schebler Carburetor, 2-inch	37.50
Each...D.P. \$55.55	
Model L Schebler Carburetor, 2½-inch	60.00
Each...D.P. \$88.88	

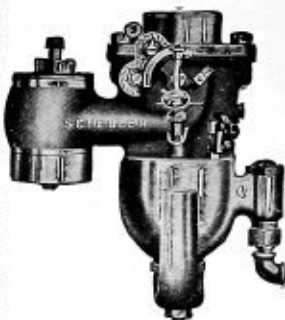
SPECIAL OUTFIT

Model L 1-inch, with Manifold, complete for Hupp, each	\$21.00
Each...D.P. \$35.55	

Model L Carburetor is also manufactured with a dash controlled air valve, this being operated by a lever which is controlled by a switch on the dashboard or steering post of the car. A dashboard adjuster or steering column control will be furnished with these carburetors when desired, and as these are separate articles they should be specified on the order. On account of changes required in the body casting for the carburetor with the dash control it is not possible to place the dash control air valve on the Model L carburetor originally built with the plain air valve.

Model L Schebler Carburetor Dash Control, 1-inch	\$13.50
Each...D.P. \$20.00	
Model L Schebler Carburetor Dash Control, 1½-inch	15.00
Each...D.P. \$22.22	
Model L Schebler Carburetor Dash Control, 1½-inch	18.75
Each...D.P. \$27.77	
Model L Schebler Carburetor Dash Control, 1½-inch	22.50
Each...D.P. \$33.33	
Model L Schebler Carburetor Dash Control, 2-inch	37.50
Each...D.P. \$55.55	

Dash or steering column control not included in prices named above, but is supplied at an additional cost, as shown on next page.



Model L



Model H



Model L Dash Control



CARBURETORS

Schebler Carburetors



Model R

easy starting, as by raising the needle from the seat an extremely rich mixture is furnished for starting, and for heating up the motor in cold weather. A choke in the air bend is also furnished.

The Dash Board Control or Steering Column Control must be used with instrument; it cannot be operated satisfactorily without them.

Model R Schebler Carburetor, 1-inch..... \$18.75

Each, D.P. \$27.77

Model R Schebler Carburetor, 1 1/4-inch..... 20.25

Each, D.P. \$30.00

Model R Schebler Carburetor, 1 1/2-inch..... 21.75

Each, D.P. \$32.22

Model R Schebler Carburetor, 1 3/4-inch..... 26.25

Each, D.P. \$38.88

Dash or steering column control not included in prices named above, but is supplied at an additional cost, as shown in next column.

SPECIAL OUTFIT

Model R 1-inch, with Manifold and Controls, for Flanders,

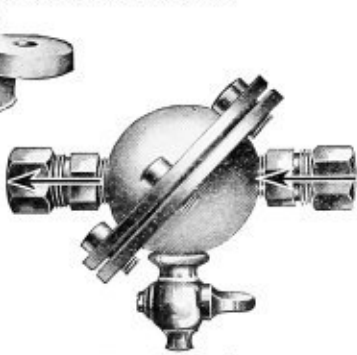
(3 speed), each..... \$21.00

Each, D.P. \$37.77

Schebler Gasoline Strainer



Type "A" Strainer



Type "B" Strainer

CARBURETOR TROUBLE is largely due to particles of dirt which get into the gasoline and into the tank during its manufacture, scales and filings from the tank and piping, and to a certain percentage of water which is in all gasoline.

Type "A" Strainer is fitted with a bracket for attaching to a support and should be connected so that the gasoline flows through the strainer in the direction shown by the arrows cast on the strainer. The strainer is furnished standard with the bracket to the left. On special orders the bracket can be placed on the right side. The strainer is furnished complete with either 1/4-inch or 5/16-inch outside diameter copper tube connections, and in ordering specify which size is wanted. Without the copper tube connections it will receive 1/4-inch standard iron pipe.

Type "B" Strainer is attached in the gasoline line without the use of a bracket, and is furnished with either 1/4-inch or 5/16-inch outside diameter copper tube connections, and in ordering specify which size is wanted.

Type A Gasoline Strainer, each..... \$2.75

Each, D.P. \$5.00

Type B Gasoline Strainer, each..... 1.25

Each, D.P. \$2.22

CARBURETOR PARTS

Dash Board and Steering Column Controls, Dash Board Adjuster and Bell Crank



Dash Control



Dash Board Adjuster



Bell Crank



Steering Column Control

The Dash Board Control for the air control of the carburetor should be attached in some convenient place on the dashboard of the car, and is operated by the foot. The Dash Board Control is furnished standard with three feet of tubing and wire. The Steering Column Control should be installed upon the steering post. As the Steering Column Control is made with different sized bands for attaching, the circumference of the steering post should be given. The Steering Column Control is furnished standard with five feet of tubing and wire. If additional length of tubing is required, same should be so specified on the order. Additional tubing will be furnished at the rate of 25 cents per foot, or fraction thereof.

The above articles are considered to be separate and distinct from the carburetor, and if required should be ordered with the carburetor.

Dash Board Control—Standard with 3 feet tubing and

wire..... \$2.00

Each, D.P. \$3.00

Steering Column Control—Standard with 5 feet tubing and

wire..... 2.00

Each, D.P. \$3.00

Bell Crank..... .50

Each, D.P. \$.75

Dash Board Adjuster..... 1.25

Each, D.P. \$2.11

Extra Tubing for Dash Board Control or Steering Column

Control, per foot or fraction thereof..... .25

Per foot, D.P. \$.37

Hot Air Drum and Tubing



The Carburetion of the heavy grade of gasoline which is now so prevalent requires a certain amount of heat. By connecting the hot air intake so as to draw the warm air off the manifold, better results will be obtained. For this purpose a hot air drum has been designed which will adjust itself to almost any style exhaust manifold. Flexible tubing with one-inch inside diameter will fit the air intake and connect with the drum. In ordering this connection give exact length of tubing required.

Model L Hot Air Drum, each... \$.75

Each, D.P. \$.76

Price does not include tubing.

Hot Air Flexible Tubing

Interlocking construction consists of a continuous length of Copper or Galvanized Steel Tape, rolled in a spiral, so that the edges interlock, forming the four-wall construction shown; as the tape is rolled a groove is formed, containing an especially prepared asbestos packing, which remains fully protected from internal or external wear.

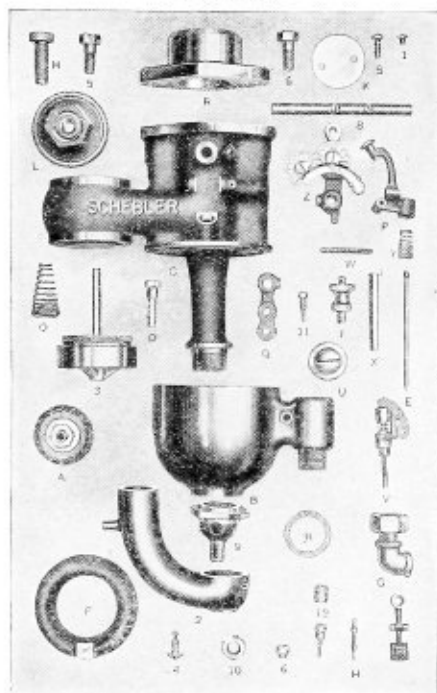
1-inch Flexible Metal Tubing, per foot..... \$.60

Per foot, D.P. \$.48



CARBURETOR PARTS

Schebler



Price List of Parts—Model L

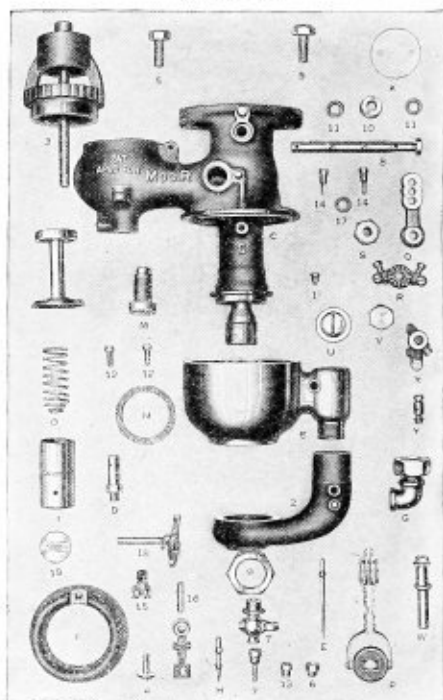
Symbol	NAME	1" 11"	1 1/2"
	Body Complete	\$15.00	\$17.50
A	Bowl Complete	6.50	7.50
B	Leather Air Valve Disc	.50	.50
C	Bowl Casting	5.00	6.00
D	Spray Nozzle	8.00	10.00
E	Needle Valve	.20	.20
F	Cork Float	.20	.20
G	Gasoline Union	.20	.20
H	Float Valve	.20	.20
I	Needle Valve Adj. Kauri	.20	.20
J	Float Lever	.20	.20
K	Throttle Disc	.10	.10
L	Air Valve Cap	1.50	1.50
M	Air Valve Adjusting Screw	.20	.20
N	Cork Gasket for Bowl	.10	.10
O	Air Valve Spring	.10	.10
P	Needle Valve Lift Lever	.40	.40
Q	Throttle Lever	.40	.40
R	Flange	1.00	2.00
S	Throttle Stop Screw	.10	.10
U	Bowl Cap	.30	.30
V	Plunger	.50	.50
W	Needle Valve Lift Lever Pin	.10	.10
X	Needle Valve Guide	.30	.30
Y	Needle Valve Lift Lever Spring	.10	.10
Z	Cam Complete	1.60	1.60
1	Throttle Stop Lock Screw	.10	.10
2	Air Bend	2.00	2.00
3	Air Valve Seat	2.00	2.00
4	Float Washer and Screw	.20	.20
5	Flange Cap Screw	.10	.10
6	Float Valve Retainer Nut	.10	.10
7	Float Lever Screw	.10	.10
8	Throttle Shaft	.30	.30
9	Bowl Lock Nut Casting for Air Bend	.50	.50
10	Air Bend Lock Nut	.10	.10
11	Throttle Lever Lock Screw	.10	.10
12	Water Jacket Plug	.10	.10

NOTE:—When ordering parts, always state size and model carburetor for which they are wanted.

Prices On This Page Subject to Special Discount.

CARBURETOR PARTS

Schebler



Price List of Parts—Model R

Symbol	NAME	1" 11"	1 1/2"
D	Spray Nozzle	.20	.20
E	Needle Valve	.20	.20
F	Cork Float	.50	.50
G	Gasoline Union	.20	.20
H	Float Valve	.20	.20
I	Venturi Tube	.60	.60
J	Float Lever	.20	.20
K	Throttle Disc	.10	.10
M	Air Valve Adjusting Screw	.20	.20
N	Bowl Gasket	.10	.10
O	Air Valve Spring	.10	.10
P	Needle Valve Lift Lever	1.00	1.00
Q	Throttle Lever	.40	.40
R	Throttle Shaft Adjusting Stop	.40	.40
S	Dash Control Shaft Bearing	.20	.20
T	Drain Cock	.40	.40
U	Bowl Cap	.30	.30
V	Dash Control Blank Plug	.20	.20
W	Dash Control Lever	.50	.50
X	Dash Control Lever	.40	.40
Y	Binding Post: Binding Post Screw, Binding Post Washer, Binding Post Nut	.20	.20
1	Venturi Tube Lock Screw	.10	.10
2	Air Bend	2.00	2.00
3	Dash Pot Air Valve Seat	2.00	2.50
4	Float Washer and Screw	.20	.20
5	Flange Cap Screws	.10	.10
6	Air Valve Retainer Nut	.10	.10
7	Float Lever Screw	.10	.10
8	Throttle Shaft	.30	.30
9	Bowl Lock Nut	.20	.20
10	Throttle Shaft Collar	.10	.10
11	Throttle Shaft Gasket	.10	.10
12	Dash Control Tube Lock Screw	.10	.10
13	Float Lever Screw Bearing	.10	.10
14	Throttle Lever Lock Screw	.10	.10
15	Air Valve Friction Lever	.20	.20
16	Air Valve Friction Lever Pin	.10	.10
17	Dash Control Shaft Gasket	.10	.10
18	Air Bend Lever Shaft and Spring	.50	.50
19	Air Bend Disc	.10	.10

NOTE:—When ordering parts, always state size and model carburetor for which they are wanted.

Prices On This Page Subject to Special Discount.



THE GIBSON COMPANY

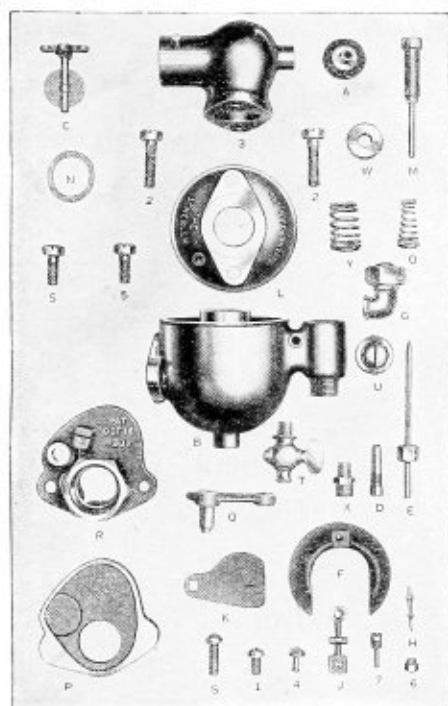
INDIANAPOLIS



41

CARBURETOR PARTS

Schebler



Price List of Parts—Model D

Symbol	NAME	1" 11"	1 1/2"
	Air Valve Complete	\$4.00	\$5.00
	Bowl Complete	9.00	12.00
	Throttle Complete	4.00	6.00
A	Leather Air Valve Disc	.20	.20
B	Bowl Casting	6.00	9.00
C	Butterfly Shutter Complete	.50	.50
D	Spray Nozzle	.20	.20
E	Needle Valve	.20	.20
F	Cork Float	.50	.50
G	Gasoline Union	.30	.30
H	Float Valve	.20	.20
J	Float Lever	.20	.20
K	Throttle Disc	.10	.10
L	Lid	2.00	3.00
M	Air Valve Adjusting Screw	.20	.20
N	Cork Gasket for Lid	.10	.10
O	Air Valve Spring	.10	.10
P	Throttle Back	1.50	2.00
Q	Throttle Lever	.40	.40
R	Throttle Front with Pipe Thread	2.00	3.50
S	Throttle Stop Screw	.10	.10
T	Drain Cock	.40	.40
U	Bowl Cap	.30	.30
V	Flusher	.50	.50
W	Lock Nut for Adjusting Screw	.10	.10
X	Needle Valve Connection	.20	.20
Y	Lock Spring for Adjusting Screw	.10	.10
1	Throttle Stop Lock Screw	.10	.10
2	Air Valve Cap Screw	.10	.10
3	Air Valve Casting	3.00	4.00
4	Float Washer Screw	.20	.20
5	Throttle Cap Screw	.10	.10
6	Float Valve Retainer Nut	.10	.10
7	Float Lever Screw	.10	.10

NOTE:—When ordering parts, always state size and model carburetor for which they are wanted.

Prices On This Page Subject to Special Discount.

CARBURETOR PARTS

Schebler



Price List of Parts—Model H

Symbol	NAME	1" 11"	1 1/2"
	Body Complete		\$10.00
	Bowl Complete		6.00
A	Leather Air Valve Disc		.20
B	Bowl Casting		5.00
C	Body Casting		6.00
D	Spray Nozzle		.20
E	Needle Valve		.20
F	Cork Float		.50
G	Gasoline Union Parts R and S		.20
H	Float Valve		.20
I	Needle Valve Adjusting Knurl		.20
J	Float Lever		.20
K	Throttle Disc		.10
L	Low Speed Adjusting Screw		.10
M	Air Valve Adjusting Screw		.20
N	Cork Gasket for Bowl		.10
O	Air Valve Spring		.10
P	Needle Valve Lift Lever		.40
Q	Throttle Lever		.40
R	Gasoline Union Nut		.10
S	Gasoline Union Nipple		.10
T	Needle Valve Spring		.10
U	Bowl Cap		.30
V	Flusher		.50
W	Needle Valve Lift Lever Pin		.10
X	Needle Valve Guide		.50
Y	Needle Valve Lift Lever Spring		.10
Z	Cam Complete		1.00
1	Low Speed Lock Screw		.10
2	Air Bend, Regular Style		.50
3	Air Valve Casting		2.00
4	Float Washer and Screw		.20
5	Throttle Lever Lock Nut		.10
6	Float Valve Retainer Nut		.10
7	Float Lever Screw		.10
8	Throttle Shaft		.50
9	Bowl Lock Nut		.20
10	Air Valve Spring Retainer Nut		.10
11	Needle Valve Lock Screw		.10
12	Air Valve Adjusting Knurl		.20
13	Lift Lever Pin Lock Screw		.10
14	Friction Spring		.10

NOTE:—When ordering parts, always state size and model carburetor for which they are wanted.

Prices On This Page Subject to Special Discount.



CARBURETORS

Stromberg Carburetors



Type "HA"—
Water-Jacketed

EACH	EACH
No. 2, 1½-in. \$75.00	No. 4, 1½-in. \$35.00
Each..D.P. \$41.66	Each..D.P. \$38.33
No. 3, 1½-in. 27.50	No. 5, 2-in. 47.50
Each..D.P. \$45.82	Each..D.P. \$79.15
	No. 7, 2½-in. 60.00
	Each..D.P. \$100.00



Type "H"

EACH
No. 1—1-inch, each..... \$20.00
Each..D.P. \$33.33
No. 2—1½-inch, each..... 22.50
Each..D.P. \$37.50
No. 3—1½-inch, each..... 25.00
Each..D.P. \$41.66



Type "HB"—
Horizontal Type

EACH
No. 1—1-inch, each..... \$20.00
Each..D.P. \$33.33
No. 2—1½-inch, each..... 22.50
Each..D.P. \$37.50
No. 3—1½-inch, each..... 25.00
Each..D.P. \$41.66

The three types of carburetors shown on this page are identical in design with the exception that the "HA" is water-jacketed and the "HB" has a horizontal outlet. These types of new Stromberg Carburetors developed to take care of high-grade motors with the low-grade fuel which is in use at the present time and are especially adapted to obtain economy for the user without any sacrifice of power or acceleration.

They have only two adjustments, high and low speed, both working directly on the gasoline supply. The combination of which gives the best and most efficient mixture for all speeds. The air horn equipment, into which a warm air supply from around the exhaust manifold can be introduced, assures heat enough for complete vaporization from the heaviest fuels (see next page).

The gasoline for low speed is taken from a spray nozzle located in the venturi tube, through which the hot air passes. This type has a second nozzle in the center of the air valve which is automatically regulated by the center of the air valve, thus supplying the necessary volume of gasoline for high speed and heavy duty work.

The dash pot, with the piston riding in gasoline, obviates all fluttering of the air valve stem.

This type is made with a dash or steering post control, which regulates both the spring tension and needle opening. This insures good operation regardless of weather or different grades of gasoline.

These carburetors are further fitted with what is known as a strangle valve in the primary air opening, for starting in cold weather. Even though the carburetor and engine are at zero temperature, the high vacuum produced in the carburetor by closing all air inlets readily vaporizes the gasoline and starting is assured.

The glass float chamber, non-leakable metal floats and indestructible needle valve are exclusive features on the Stromberg Carburetor. Only the best of material and workmanship are used in Stromberg Carburetors and each part is subjected to a most rigid inspection. After the carburetors are completely assembled and thoroughly inspected, they are sent out to the laboratory and made to operate a motor perfectly.

This careful process applies to every carburetor manufactured by the Stromberg Motor Devices Company. As the types of cars change considerably from year to year, it will be necessary for us to know just what model and year your car is before we can recommend which new Stromberg Carburetor will be most economically proficient.

DASH CONTROLS

These controls enable you to change your gasoline mixture and air supply without even leaving the seat. Even though the carburetor and engine are at zero temperature, the high vacuum produced by closing all air inlets makes the engine start without trouble.

Single Dash Control

Operates the butterfly valve in the air horn of the carburetor and is especially helpful in producing easy starting and warming up of motor.

Price—Complete with 42 inch tubing and wire, nickel plate, each.....\$1.50
Each..D.P. \$2.48

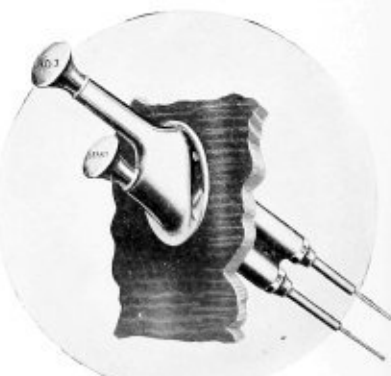
Double Dash Control

Operates the strangle valve as well as the butterfly valve, making the governing of the carburetor perfect.

Price—Complete with 84 inch tubing and wire, nickel plate, each.....\$2.00
Each..D.P. \$3.33



Single Dash Control



Double Dash Control



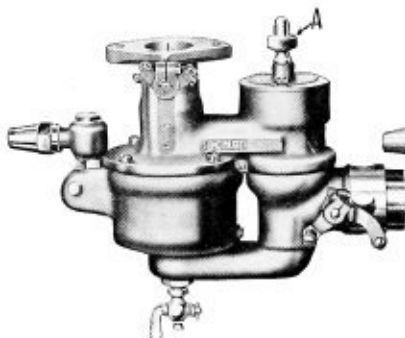
THE GIBSON COMPANY INDIANAPOLIS



43

CARBURETORS

Stromberg Carburetors



Type "K"

PRICE

K No. 1-4-in. \$15.50
Each, D.P. \$25.82

ECONOMY

The foundation of the general design of this carburetor is economy without sacrifice of power or acceleration. Official tests have proven it to be the best on the market.

POWER

The complete vaporization of the gasoline and the automatic production of the correct mixture for every throttle position gives maximum power at every speed.

LOW THROTTLE

The special low speed adjustment and the complete breaking up of the gasoline at low velocity permits the continuous supply of just right throttle mixture without loading the motor.

QUICK, SNAPPY PICK-UP

The elimination of all flutter, by means of the new balanced air valve and the new high and perfectly proportioned venturi tube to carry the mixture well up to the manifold without precipitation, assures maximum flexibility.

NON-FLOODING

The new simplified float mechanism introduced in this carburetor, with the Stromberg metal float and needle valve of special metal, eliminates all possibility of flooding.

Steering Post Control



This steering post control operates the butterfly valve in the air horn of the carburetor and is especially helpful in producing easy starting and warming up of the motor.

It is made of high-grade material, superior workmanship and finished in heavy nickel plate.

Price Complete—Clamp and 60-inch Tubing and Wire, nickel plate, each \$1.50
Each, D.P. \$2.48



Type "KO"

Special Overland Outfit

PRICE

KO—One Carburetor \$15.50
Steering Post Control 1.50
Air Heating Housing 1.00
Necessary Metallic Tubing80

Complete equipment \$18.80
Complete, D.P. \$31.32

This model "KO" is exactly the same in construction as the "K," with the exception of the flange being turned at right angles to the carburetor body, which facilitates the installing of an Overland car.

These carburetors are designed so they can be adjusted to give exactly the correct mixture of gasoline and air at every speed, and with the gasoline broken up under the high suction and equipped with a special air heater this new Stromberg operates with absolute economy.

Stromberg Gasoline Strainer



It is commonly agreed that a large amount of carburetor and motor trouble is caused by dirt, grit and water in the gasoline working its way to the carburetor. The new Stromberg strainer is so designed that it is impossible for anything but clean, filtered gasoline to pass through. This strainer can be installed on any car, regardless of the carburetor used.

PRICES

A-16 Strainer complete with arm, shut-off cock and gasoline connections \$2.50
Each, D.P. \$4.18
A-18 Strainer complete with arm and gasoline connections, without shut-off cock 2.00
Each, D.P. \$3.33
A-17 Strainer complete with gasoline connections, without arm or shut-off cock 1.90
Each, D.P. \$3.15



Type "G"

"The Little Six Carburetor"

EACH

No. 1, 1-in. \$17.00	No. 4, 1 1/2-in. \$28.00
Each, D.P. \$28.33	Each, D.P. \$46.00
No. 2, 1 1/2-in. 19.00	No. 5, 5-in. 35.60
Each, D.P. \$31.66	Each, D.P. \$58.33
No. 3, 1 1/2-in. 23.00	
Each, D.P. \$38.33	

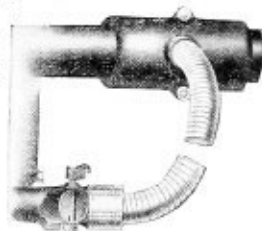
Type "G" is a new double-jet, non-water-jacketed style carburetor designed especially for "Little Sixes," but can be furnished as a single-jet type, and as such is well adapted to four-cylinder motors.

The primary nozzle is located in the main body of the carburetor with its outlet at the narrow part of the venturi tube. The secondary nozzle has its outlet in the auxiliary air passage near the mixing chamber. The quantity of gasoline supplied by this jet is controlled by the suction of the motor on this nozzle and the air which is taken from around the outside of the venturi tube.

An entirely new direct-acting float mechanism is featured in this type, together with the glass float chamber, non-leakable metal float, new STROMBERG indestructible metal needle valve and extended venturi tube.

The new style air horn with which this model is regularly equipped, also furnishes a means of introducing heat to the carburetor.

Stromberg Air Heater



The Stromberg Manifold Housing equipment introduces the warm air from around the exhaust manifold into the carburetor. This heated air passes by the gasoline nozzle through the venturi tube, causing a complete vaporization of the gasoline, thus creating a more homogeneous and combustible mixture, particularly in cold weather. The results are increased economy and smoother running.

Housing, 1 1/2-inch diameter, each \$1.00
Each, D.P. \$1.66
Housing, 2-inch diameter, each 1.00
Each, D.P. \$1.66
Housing, 2 1/2-inch diameter, each 1.25
Each, D.P. 2.08

Order housing to fit outside diameter of exhaust pipe at point where you wish to connect. These housings can be made in any length.

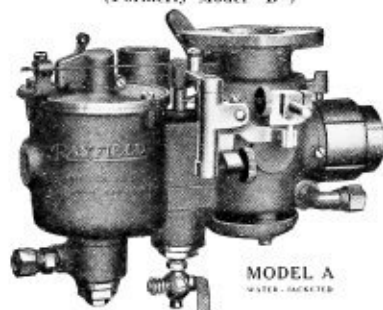
Flexible Metal Tubing, 1 1/2-inch diameter, per foot \$.70
Per foot, D.P. \$.55
Flexible Metal Tubing, 1 1/2-inch diameter, per foot80
Per foot, D.P. \$.66
Flexible Metal Tubing, 1 1/2-inch diameter, per foot90
Per foot, D.P. \$.73



CARBURETORS

Rayfield Carburetors

Model "A" Water Jacketed (Formerly Model "D")



MODEL A
WATER-JACKETED

Improved float arrangement maintains a correct gasoline level and insures freedom from leaking and flooding. It is perfectly adapted to both gravity and pressure feed systems.

Water is the cause of much carburetor trouble. Our float chamber construction provides perfect draining facilities which prevent the possibility of such trouble.

Easy to adjust. You cannot make a mistake in adjusting Rayfield carburetors. Directions are plainly marked on the adjustments.

Throttle stop arm has a positive locking device.

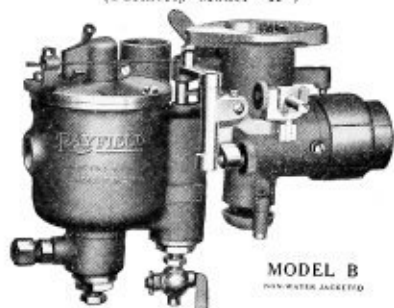
Needle valve and the Mechanical Air Valve are operated simultaneously by the throttle, thus regulating the fuel supply in correct proportion to the air admitted.

Strainer Trap. An improved strainer trap is embodied in all models. This eliminates the possibility of trouble due to dirty fuel. This new trap construction permits the gasoline connection to be set in any position desired. Dirt can be easily removed.

RAYFIELD			RAYFIELD		
A2	1-in.	\$25.00	AA5	1 1/2-in.	40.00
Each..D.P.	\$37.04		Each..D.P.	\$59.04	
A3	1 1/2-in.	30.00	AA6	2-in.	45.00
Each..D.P.	\$44.44		Each..D.P.	\$66.66	
A4	2-in.	35.00	AA7	2 1/2-in.	80.00
Each..D.P.	\$51.81		Each..D.P.	\$118.44	
AA3 Double Jet	1 1/2-in.	32.50	AA8	3-in.	100.00
Each..D.P.	\$48.14		Each..D.P.	\$148.15	
AA4	1 1/2-in.	37.50			
Each..D.P.	\$55.55				

Model "B" Non-Water Jacketed

(Formerly Model "H")



MODEL B
NON-WATER JACKETED

Water-jacketed carburetors should be used on all motors except those that are air-cooled and those using the Thermosiphon system. On these types of motors we recommend the use of our Model "B" non-water jacketed carburetor.

Model "B" is our non-water jacketed carburetor and is made to supply the demand for a carburetor where hot water is not used.

It is the same design, construction, quality of material, workmanship, simplicity of adjustment and installation as our Model "A."

Heat must be supplied to the Model "B" carburetor by using the Rayfield hot air outfit.

RAYFIELD			RAYFIELD		
B2	1-in.	\$20.00	BBS Double Jet	1 1/2-in.	25.00
Each..D.P.	\$29.64		Each..D.P.	\$37.04	
B3	1 1/2-in.	22.50	B31	1 1/2-in.	27.50
Each..D.P.	\$33.73		Each..D.P.	\$40.73	
B4	2-in.	23.00			
Each..D.P.	\$34.61				

CARBURETORS

Rayfield Carburetors

Model "G" Water Jacketed



MODEL G
WATER-JACKETED

The Model "G" is a water jacketed carburetor which only two adjustments, which are simple and easy of access; one for low speed and one for high, both controlling the supply of gasoline.

It has three air intakes—the constant or fixed air opening and two automatically controlled valves. These air valves are interconnected and operate together in accordance with the suction of the motor.

Fuel is supplied through two nozzles. One supplies all the gasoline required when the motor is idling. The additional gasoline required for high speeds is furnished by a nozzle which is controlled by a tapered metering pin located under the automatic air valve. As the air valve is drawn open, admitting more air, it operates the metering pin, which gradually opens the nozzle, supplying additional gasoline in correct proportion to the air.

A dash or steering post control is furnished with all RAYFIELD carburetors. This control raises the nozzle needle, supplying a richer mixture for starting purposes and for use in cold weather.

RAYFIELD			RAYFIELD		
G-2 and GL-2	1-in.	\$25.00	G-5	1 1/2-in.	40.00
Each..D.P.	\$37.04		Each..D.P.	\$59.04	
G-3 and GL-3	1 1/2-in.	30.00	G-6	2-in.	45.00
Each..D.P.	\$44.44		Each..D.P.	\$66.66	
G-4 and GL-4	2-in.	35.00			
Each..D.P.	\$51.81				

Model "L" Non-Water Jacketed



MODEL L
NON-WATER JACKETED

The Model "L" RAYFIELD is a non-water jacketed carburetor. The design and construction is the same as the Model "G." The same high standard of material and workmanship in all RAYFIELD carburetors is employed in the manufacture of Model "L." It is intended to be used only on Thermosiphon and air-cooled motors where the water-jacketed carburetor cannot be used.

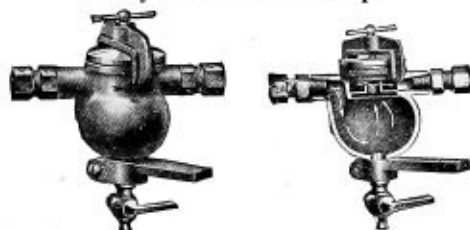
Heat to the carburetor is necessary to properly vaporize the low-grade fuel now in use. Hot air or hot water should be used, and, if possible, both. See hot air outfit described on another page.

RAYFIELD			RAYFIELD		
L-2 and LL-2	1-in.	\$20.00	L-4	1 1/2-in.	25.00
Each..D.P.	\$29.64		Each..D.P.	\$37.05	
L-3 and LL-3	1 1/2-in.	22.50			
Each..D.P.	\$33.73				



CARBURETORS

Rayfield Strainer-Trap



Exterior View

Sectional View

INSTALLATION

The Rayfield Strainer-Trap is placed anywhere between the tank and carburetor in the gasoline line.

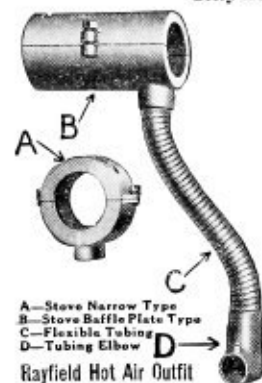
The trap is furnished with a brace by which to fasten it to any convenient frame or other car member, and it can be placed in the most accessible position.

Always install the trap with arrow pointing toward the carburetor.

TO CLEAN

Simply loosen the thumb screw in top, remove clamp and lift out cover and strainer, clean strainer and replace. This should be done occasionally. Trap should be drained through cock once a month or oftener. Trap is 5 inches high and 2 1/2 inches wide. Furnished complete as shown, with drain cock, brace and two connections, to take 1-inch, 5/16-inch or 1/2-inch O. D. tubing. Five-sixteenth-inch connections furnished unless otherwise ordered. Price, in Brass\$2.00 Each, D.P. \$2.98

Rayfield Hot Air Outfit



A—Stove Narrow Type
B—Stove Baffle Plate Type
C—Flexible Tubing
D—Tubing Elbow

Rayfield Hot Air Outfit

Heat must be furnished to the carburetor to properly vaporize low-grade fuel and to secure the maximum efficiency from your motor.

The Rayfield method of getting additional heat to the carburetor has proven to be correct. A stove or housing is clamped around the exhaust manifold or exhaust pipe and heat is transferred by means of flexible tubing to the fixed air intake of the carburetor. The pure heated air comes in direct contact with the gasoline at the opening of the nozzle, thereby producing perfect vaporization.

Installation of this outfit is made by locating the stove just back of the last cylinder in order that the highest degree of heat be secured from all cylinders. One end of the flexible tubing is fitted into the stove and the other end into the elbow attached to the fixed air opening of the carburetor. The ends can be fastened by soldering or by using a cotter pin.

In ordering, specify outside diameter of exhaust manifold or exhaust pipe at a point where stove is to be attached. Give length of tubing required, allowing sufficient length for bends and turns. For best results use the Baffle Plate Stove.

Price Lists

BAFFLE PLATE TYPE

No. 39-F. Length 6 inches, can be bored from 1 1/2 to 2 1/2 inches, each	\$1.25
Each, D.P.	\$1.86
No. 131-F. Length 6 inches, can be bored from 2 1/2 to 3 1/2 inches, each	1.70
Each, D.P.	\$2.48
No. 141-F. Length 4 inches, can be bored from 2 1/2 to 3 1/2 inches, each	1.25
Each, D.P.	\$1.86
No. 143-F. Length 4 inches, can be bored from 1 1/2 to 2 1/2 inches, each	1.00
Each, D.P.	\$1.48
No. 151-F. Length 4 inches, can be bored from 1 1/2 to 2 1/2 inches, each	1.00
Each, D.P.	\$1.48
No. 918. Length 4 inches, can be bored from 2 to 3 1/2 inches, each	1.25
Each, D.P.	\$1.86

NARROW TYPE

No. 54-F. Can be bored from 1 1/2 to 2 1/2 inches, each	\$1.00
Each, D.P.	\$1.48
No. 68-F. Can be bored from 2 1/2 to 3 1/2 inches, each	1.00
Each, D.P.	\$1.48
No. 131-F. Can be bored from 1 1/2 to 2 1/2 inches, each	.75
Each, D.P.	\$1.11
No. 302-F. 1 1/16-inch Tubing, per foot	\$.45
Per foot, D.P.	\$.66
Tubing Elbow (Standard), each	.25
Each, D.P.	\$.38

CARBURETORS

Rayfield Special Carburetors

Rayfield Carburetors can be furnished for any make of car. Manifolds, hot air outfits and all other fittings necessary to attach carburetors to the car, are not included in the price of the carburetor and are charged for as extra.

We have listed below a few well-known cars for which special Rayfield outfits are made up complete with everything necessary for making quick installation on the car:

Car	Carburetor	Each
Briscoe	1915 B-2	\$22.40
Each, D.P.		\$33.20
Buick (B-55) "Six"	1914 G-1-3	33.00
Each, D.P.		\$48.88
Cadillac	1914 G-4	37.50
Each, D.P.		\$55.55
Chandler "Six"	1914 G-3	31.00
Each, D.P.		\$45.90
Haynes "Big Six"	1914 G-3	50.00
Each, D.P.		\$44.44
Hudson "Little Six"	1914 G-3	32.50
Each, D.P.		\$48.15
Jackson "Six"	1915 Model 46 G-1-3	31.00
Each, D.P.		\$46.53
Lozier "Four"	1914 Model 34 G-4	36.50
Each, D.P.		\$54.06
Lozier "Six"	1913 and 1914 G-4	40.00
Each, D.P.		\$59.26
Marmion "6-41"	1914 G-1-4	57.00
Each, D.P.		\$54.82
Mitchell "7-6" and "5-6"	1913 and 1914 G-4	35.50
Each, D.P.		\$52.60
Overland "69" and "79"	1913 and 1914 LL-2	28.50
Each, D.P.		\$34.82
Overland "80" and "81" (81 is LL-2)	1915 L-2	28.50
Each, D.P.		\$34.82
Packard "Six"	1914 Model 48 G-6	47.00
Each, D.P.		\$69.62
Patterson "33"	1914 L-2	22.50
Each, D.P.		\$33.04
Premier "6-60"	1910-11-12-13-14 G-4	37.00
Each, D.P.		\$54.82
Stearns-Knight "Six"	1913 G-4	37.50
Each, D.P.		\$55.55
Stearns-Knight "Four"	1913 G-4	37.00
Each, D.P.		\$54.82
Studebaker "Four"	1914 G-2	30.50
Each, D.P.		\$45.18
Studebaker "Six"	1914 G-3	33.50
Each, D.P.		\$49.62
Winton "Six"	1909-10-11-12-13-14 G-4	35.00
Each, D.P.		\$51.85

In ordering carburetors be sure to specify the make, year and model of car, number of cylinders, bore and stroke. This will insure your getting the right carburetor and fittings to make proper installation.

Hot Air Flexible Tubing

For All Carburetors



Hot Air Flexible Tubing

Interlocking construction consists of a continuous length of copper or galvanized steel tape, rolled in a spiral, so that the edges interlock, forming the four-wall construction shown. As the tape is rolled a groove is formed, containing an especially prepared asbestos packing, which remains fully protected from internal or external wear.

2-in. Flexible Metal Tubing, per ft. \$0.40
Per foot, D.P. \$.40
Per foot, in 50-foot lengths, D.P. .26

2-in. Flexible Metal Tubing, per foot	.50
Per foot, D.P.	\$.44
Per foot, in 50-ft. lengths, D.P.	\$.40
1-in. Flexible Metal Tubing, per foot	.60
Per foot, D.P.	\$.48
Per foot, in 50-ft. lengths, D.P.	\$.44
1 1/2-in. Flexible Metal Tubing, per foot	.65
Per foot, D.P.	\$.50
Per foot, in 50-ft. lengths, D.P.	\$.46
1 1/4-in. Flexible Metal Tubing, per foot	.70
Per foot, D.P.	\$.55
Per foot, in 50-ft. lengths, D.P.	\$.48
1 3/8-in. Flexible Metal Tubing, per foot	.80
Per foot, D.P.	\$.66
Per foot, in 50-ft. lengths, D.P.	\$.60
1 1/2-in. Flexible Metal Tubing, per foot	.90
Per foot, D.P.	\$.73
Per foot, in 50-ft. lengths, D.P.	\$.66



PRIMERS

Ideal Primer



A well constructed, reasonable priced Primer. Is installed on the dash and operates entirely by gravity. With a cold engine on these frosty days, it is a necessity.

Can be installed on any auto and comes complete with 26 inches of $\frac{1}{2}$ -inch O. D. Copper Tubing with bushing of $\frac{1}{2}$ -inch I. P. S. for connecting to manifold.

Height over all 6 inches. Packed in individual cartons; weight one pound.

Ideal Dash Primer, each . . . \$2.50
Each . . . D.P. \$2.00
Dozen . . . D.P. 20.00

Imperial Prime-Ur

As necessary as the magneto itself. Is bolted to the dash and adds to its appearance. This Primer consists of a pump connected with $\frac{1}{2}$ -inch pipe to the gasoline supply line and another small $\frac{1}{2}$ -inch pipe leads to the manifold. All that is necessary to prime the motor is to open the small valve at the base of the Primer, draw the plunger upward, close the valve, push the plunger downward, and "there you go." It forces a spray of gasoline into the manifold and your motor starts on the first turn. It's essential to the hand cranked and a necessity on electric-started cars. Comes complete with pipe and fittings. Can be installed in a very short time and makes the car complete.



No. 51-D Imperial Prime-Ur, each . . . \$5.00
Each . . . D.P. \$4.44
Dozen . . . D.P. 46.66

Imperial Cowl-Dash Prime-Ur

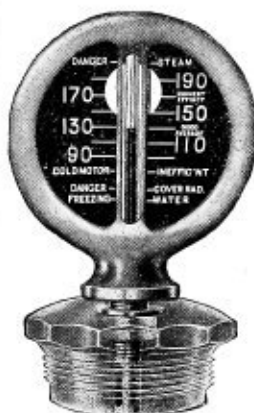


Outfit includes pump tubing and fittings.
No. 53-D Imperial Cowl-Dash Prime-Ur, each . . . \$5.00
Each . . . D.P. \$4.44
Dozen . . . D.P. 46.66

RADIATOR THERMOMETER

Boyce Motometer

(Patents Pending)



A gasoline motor is a heat motor, yet heretofore no means has been provided for indicating this heat.

To operate a heat engine without a heat gauge is like operating a steam engine without a steam gauge.

Nothing serious can possibly go wrong with a gasoline motor without first giving symptoms of excessive heat.

Costly repairs can be absolutely avoided by knowing the temperature of your radiator.

The Motometer is a specially constructed thermometer that tells you the inside temperature of your radiator while you drive—night or day.

With a Motometer mounted on your radiator cap you are forewarned instantly of impending trouble. It is not necessary to listen for knocks or feel for loss of power; one glance at the ever visible Motometer tells you just what is going to happen under the hood.

Motometer Standard Model. Finished in beautiful black enamel with brass or nickel trimming; glass crystals on both sides, each . . . \$10.00
Each . . . D.P. \$16.66

Motometer Junior Model. Black dial with nickel or brass finish, each . . . 5.00
Each . . . D.P. \$8.33

Motometer Ford Special. Same as Junior, but including handsome special radiator cap, each . . . 5.50
Each . . . D.P. \$9.16

Either model of the Motometer can be used on any car regardless of horsepower and can be fitted to any screw or hinged type of radiator cap.



The Motor Eye, with its mercury-charged, metallic thermo, conductor rod in direct contact with the water as it leaves the motor, keeps before the driver at all times an accurate showing of conditions beneath the hood.

It is an absolutely sure means by which the driver can be warned of trouble or irregularity throughout the entire power plant.

The Motor Eye is an accurate and reliable instrument.

Each . . . \$2.50
Each . . . D.P. \$4.18



HOSE CLAMPS

Wire Hose Clamps



A simple and inexpensive device. Makes an absolutely tight joint and may be instantly applied. No tool required.

No. 3 Wire Hose Clamp for hose 1 to 1 1/2 outside.....	\$0.08
Dozen.....D.P. \$0.73	6-Dozen Lots, Doz.....D.P. \$0.66
No. 4 Wire Hose Clamp for hose 1 to 1 1/2 outside.....	.10
Dozen.....D.P. \$1.00	6-Doz. Lots, Doz.....D.P. \$0.90
No. 5 Wire Hose Clamp for hose 1 1/2 to 2 1/2 outside.....	.10
Dozen.....D.P. \$1.11	6-Dozen Lots, Doz.....D.P. \$1.00
No. 6 Wire Hose Clamp for hose 2 1/2 to 3 1/2 outside.....	.10
Dozen.....D.P. \$1.33	6-Dozen Lots, Doz.....D.P. \$1.22
No. 7 Wire Hose Clamp for hose 3 1/2 to 4 1/2 outside.....	.10
Dozen.....D.P. \$1.44	6-Dozen Lots, Doz.....D.P. \$1.33

Thompson Hose Clamps



No.	Inside Diameter	Price, Each	No.	Inside Diameter	Price, Each
100.....	1 1/16	\$0.05	113.....	1 3/4	\$0.10
Dozen.....		D.P. \$0.53	Dozen.....		D.P. \$0.88
6-Doz. Lots, Doz.....		D.P. .44	6-Doz. Lots, Doz.....		D.P. .80
101.....	1 3/16	.05	114.....	1 13/16	.10
Dozen.....		D.P. \$0.53	Dozen.....		D.P. \$0.88
6-Doz. Lots, Doz.....		D.P. .44	6-Doz. Lots, Doz.....		D.P. .80
102.....	1 7/8	.05	115.....	1 7/8	.15
Dozen.....		D.P. \$0.53	Dozen.....		D.P. \$1.11
6-Doz. Lots, Doz.....		D.P. .44	6-Doz. Lots, Doz.....		D.P. 1.00
103.....	1 5/16	.05	116.....	2	.15
Dozen.....		D.P. \$0.53	Dozen.....		D.P. \$1.11
6-Doz. Lots, Doz.....		D.P. .44	6-Doz. Lots, Doz.....		D.P. 1.00
104.....	1	.05	117.....	2 1/8	.15
Dozen.....		D.P. \$0.53	Dozen.....		D.P. \$1.11
6-Doz. Lots, Doz.....		D.P. .44	6-Doz. Lots, Doz.....		D.P. 1.00
105.....	1 1/8	.05	118.....	2 3/8	.15
Dozen.....		D.P. \$0.53	Dozen.....		D.P. \$1.33
6-Doz. Lots, Doz.....		D.P. .44	6-Doz. Lots, Doz.....		D.P. 1.22
106.....	1 3/16	.05	119.....	2 1/2	.15
Dozen.....		D.P. \$0.53	Dozen.....		D.P. \$1.55
6-Doz. Lots, Doz.....		D.P. .44	6-Doz. Lots, Doz.....		D.P. 1.40
107.....	1 1/4	.05	120.....	2 5/8	.15
Dozen.....		D.P. \$0.53	Dozen.....		D.P. \$1.55
6-Doz. Lots, Doz.....		D.P. .44	6-Doz. Lots, Doz.....		D.P. 1.40
108.....	1 5/16	.10	121.....	2 3/4	.15
Dozen.....		D.P. \$0.66	Dozen.....		D.P. \$1.66
6-Doz. Lots, Doz.....		D.P. .60	6-Doz. Lots, Doz.....		D.P. 1.50
109.....	1 3/8	.10	122.....	2 7/8	.15
Dozen.....		D.P. \$0.66	Dozen.....		D.P. \$1.66
6-Doz. Lots, Doz.....		D.P. .60	6-Doz. Lots, Doz.....		D.P. 1.50
110.....	1 7/16	.10	123.....	2 15/16	.15
Dozen.....		D.P. \$0.66	Dozen.....		D.P. \$1.77
6-Doz. Lots, Doz.....		D.P. .60	6-Doz. Lots, Doz.....		D.P. 1.60
111.....	1 1/2	.10	124.....	3	.15
Dozen.....		D.P. \$0.66	Dozen.....		D.P. \$1.88
6-Doz. Lots, Doz.....		D.P. .60	6-Doz. Lots, Doz.....		D.P. 1.77
112.....	1 5/8	.10	125.....	3 1/8	.15
Dozen.....		D.P. \$0.88	Dozen.....		D.P. \$1.88
6-Doz. Lots, Doz.....		D.P. .80	6-Doz. Lots, Doz.....		D.P. 1.77

Sure Grip Hose Clamps



No. 8, 1 1/2 inside, each.....	\$0.05	No. 12, 2 inside, each.....	.15
Dozen.....D.P. \$0.53		Dozen.....D.P. \$2.00	
6-Dozen Lots, Dozen.....D.P. .60		6-Dozen Lots, Dozen.....D.P. 1.80	
No. 9, 1 1/4 inside, each.....	.05	No. 13, 2 1/4 inside, each.....	.15
Dozen.....D.P. \$0.66		Dozen.....D.P. \$2.22	
6-Dozen Lots, Dozen.....D.P. .60		6-Dozen Lots, Dozen.....D.P. 2.00	
No. 10, 1 1/4 inside, each.....	.10	No. 14, 2 1/2 inside, each.....	.15
Dozen.....D.P. \$1.00		Dozen.....D.P. \$2.44	
6-Dozen Lots, Dozen.....D.P. .90		6-Dozen Lots, Dozen.....D.P. 2.20	
No. 11, 1 3/4 inside, each.....	.10	No. 15, 3 inside, each.....	.20
Dozen.....D.P. \$1.00		Dozen.....D.P. \$3.55	
6-Dozen Lots, Dozen.....D.P. 1.50		6-Dozen Lots, Dozen.....D.P. \$3.20	
No. 4, 5/16 inside, each.....	\$0.05		
Dozen.....D.P. \$0.66			
6-Dozen Lots, Dozen.....D.P. .60			
No. 5, 3/8 inside, each.....	.05		
Dozen.....D.P. \$0.66			
6-Dozen Lots, Dozen.....D.P. .60			
No. 6, 1/2 inside, each.....	.05		
Dozen.....D.P. \$0.66			
6-Dozen Lots, Dozen.....D.P. .60			
No. 7, 1 inside, each.....	.05		
Dozen.....D.P. \$0.66			
6-Dozen Lots, Dozen.....D.P. .60			

Gibson Quality Radiator Hose



This line of Radiator Hose has been found to be the highest grade in material of this kind. It is tested thoroughly as to materials and workmanship. It is built with a view to meeting the demands made on this part of the automobile. Will stand extreme heat without deterioration, and unlike most radiator hose, will not dry out and crack.

Gibson Quality Radiator Hose is packed for the convenience of the dealer. It comes in three (3) foot lengths, six lengths to the carton. This prevents waste, and at the same time keeps the hose in a convenient form.

3-inch Radiator Hose, 3 ply, outside diameter 1 1/16, per foot.....	\$0.25
Per foot.....D.P. \$0.26	6-Piece Lots, per foot.....D.P. \$0.24
1-inch Radiator Hose, 3 ply, outside diameter 1 1/2, per foot.....	.35
Per foot.....D.P. \$0.33	6-Piece Lots, per foot.....D.P. \$0.30
1 1/2-inch Radiator Hose, 3 ply, outside diameter 1 3/4, per foot.....	.38
Per foot.....D.P. \$0.42	6-Piece Lots, per foot.....D.P. \$0.38
1 3/4-inch Radiator Hose, 3 ply, outside diameter 1 7/8, per foot.....	.40
Per foot.....D.P. \$0.44	6-Piece Lots, per foot.....D.P. \$0.40
1 7/8-inch Radiator Hose, 3 ply, outside diameter 2, per foot.....	.50
Per foot.....D.P. \$0.53	6-Piece Lots, per foot.....D.P. \$0.48
2-inch Radiator Hose, 3 ply, outside diameter 2 1/4, per foot.....	.60
Per foot.....D.P. \$0.60	6-Piece Lots, per foot.....D.P. \$0.55
2 1/4-inch Radiator Hose, 3 ply, outside diameter 2 5/16, per foot.....	.65
Per foot.....D.P. \$0.66	6-Piece Lots, per foot.....D.P. \$0.60
2 5/16-inch Radiator Hose, 3 ply, outside diameter 2 3/4, per foot.....	.80
Per foot.....D.P. \$0.80	6-Piece Lots, per foot.....D.P. \$0.72
2 3/4-inch Radiator Hose, 3 ply, outside diameter 2 7/8, per foot.....	.90
Per foot.....D.P. \$0.84	6-Piece Lots, per foot.....D.P. \$0.80
2 7/8-inch Radiator Hose, 3 ply, outside diameter 3, per foot.....	.95
Per foot.....D.P. \$0.88	6-Piece Lots, per foot.....D.P. \$0.84
3-inch Radiator Hose, 3 ply, outside diameter 3 1/8, per foot.....	1.00
Per foot.....D.P. \$0.93	6-Piece Lots, per foot.....D.P. \$0.88



SOLDERLESS COMPRESSION COUPLINGS

All for Copper or Brass Tubing

For connecting tubing on gasoline and oiling systems without swaging or the use of solder.

No. 1 Union Joint



Both ends are fitted with sleeve nut for joining two tubes.

No. 1 Union Joint for 1/4 inch O. D. brass or copper tubing. Doz. D.P.	\$2.00
No. 11 Union Joint for 5/16 inch O. D. brass or copper tubing. Doz. D.P.	2.22
No. 12 Union Joint for 3/8 inch O. D. brass or copper tubing. Doz. D.P.	3.33

No. 2 Spring Check Valve



Compression one end, thread on other end.

No. 3 Coupling



Taped one end, compression other end.

No. 2 Spring check valve for 1/4 inch O. D. brass or copper tubing. Doz. D.P.	\$2.00
No. 21 Spring check valve for 5/16 inch O. D. brass or copper tubing. Doz. D.P.	2.22
No. 22 Spring check valve for 3/8 inch O. D. brass or copper tubing. Doz. D.P.	3.33
No. 3 Coupling for 1/4 inch O. D. brass or copper tubing. Doz. D.P.	1.66
No. 31 Coupling for 5/16 inch O. D. brass or copper tubing. Doz. D.P.	1.88
No. 32 Coupling for 3/8 inch O. D. brass or copper tubing. Doz. D.P.	3.00

No. 4 Nipple Union



Compression one end, thread on other end.

No. 5 Elbow



Compression one end, thread on other end.

No. 4 Nipple Union for 1/4 inch O. D. brass or copper tubing. Doz. D.P.	\$1.66
No. 41 Nipple Union for 5/16 inch O. D. brass or copper tubing. Doz. D.P.	1.88
No. 42 Nipple Union for 3/8 inch O. D. brass or copper tubing. Doz. D.P.	3.00
No. 5 Elbow for 1/4 inch O. D. brass or copper tubing. Doz. D.P.	2.00
No. 51 Elbow for 5/16 inch O. D. brass or copper tubing. Doz. D.P.	2.22
No. 52 Elbow for 3/8 inch O. D. brass or copper tubing. Doz. D.P.	3.33

SOLDERLESS COMPRESSION COUPLINGS

No. 6 Elbow



Compression both ends.

No. 7 Tee



Compression two opposite ends, thread on other end.

No. 6 Elbow for 1/4 inch O. D. brass or copper tubing. Doz. D.P.	\$2.77
No. 61 Elbow for 5/16 inch O. D. brass or copper tubing. Doz. D.P.	3.00
No. 62 Elbow for 3/8 inch O. D. brass or copper tubing. Doz. D.P.	3.55
No. 7 Tee for 1/4 inch O. D. brass or copper tubing. Doz. D.P.	2.66
No. 71 Tee for 5/16 inch O. D. brass or copper tubing. Doz. D.P.	3.11
No. 72 Tee for 3/8 inch O. D. brass or copper tubing. Doz. D.P.	4.44

No. 8 Tee



Compression on two ends at right angle, thread on other end.

No. 9 Tee



Compression three ends.

No. 8 Tee for 1/4 inch O. D. brass or copper tubing. Doz. D.P.	\$2.66
No. 81 Tee for 5/16 inch O. D. brass or copper tubing. Doz. D.P.	3.11
No. 82 Tee for 3/8 inch O. D. brass or copper tubing. Doz. D.P.	4.44
No. 9 Tee for 1/4 inch O. D. brass or copper tubing. Doz. D.P.	3.11
No. 91 Tee for 5/16 inch O. D. brass or copper tubing. Doz. D.P.	3.88
No. 92 Tee for 3/8 inch O. D. brass or copper tubing. Doz. D.P.	5.00
No. 64-F Like No. 9 with Ends for 1/4 inch Tubing, Center for 1/2 inch Tubing. Doz. D.P.	6.11
No. 164-F Like No. 9 with Ends for 5/16 inch Tubing, Center for 1/2 inch Tubing. Doz. D.P.	6.11
No. 264-F Like No. 9 with Ends for 3/8 inch Tubing, Center for 1/2 inch Tubing. Doz. D.P.	6.11

Sleeves and Nuts

Sleeves for any of the foregoing couplings. Doz. D.P.	\$0.26
Nuts for any of the foregoing couplings. Doz. D.P.	.55



SOLDERLESS COUPLINGS

For Connecting Brass and Copper Tubing



1 F



2 F



3 F

- No. 1F Connector for $\frac{1}{4}$ inch Tubing, doz. D.P. \$1.11
 No. 10F Connector for $\frac{5}{16}$ inch Tubing, doz. D.P. 1.33
 No. 2F Connector for $\frac{1}{4}$ inch Tubing, doz. D.P. 1.33
 No. 11F Connector for $\frac{5}{16}$ inch Tubing, doz. D.P. 2.00
 No. 3F Check Valve for $\frac{1}{4}$ inch I. P. Thread, doz. D.P. 2.00
 No. 12F Check Valve for $\frac{1}{4}$ inch I. P. Thread, doz. D.P. 4.00



4 F



5 F

- No. 4F Tee for $\frac{1}{4}$ inch Tubing, doz. D.P. \$1.88
 No. 13F Tee for $\frac{5}{16}$ inch Tubing, doz. D.P. 2.44
 No. 5F Elbow for $\frac{1}{4}$ inch Tubing, doz. D.P. 1.60
 No. 14F Elbow for $\frac{5}{16}$ inch Tubing, doz. D.P. 2.00



6 F



7 F

- No. 6F Bushing for $\frac{1}{8}$ inch I. P. Tap, doz. D.P. \$1.38
 No. 15F Bushing for $\frac{1}{4}$ inch I. P. Tap, doz. D.P. 2.44
 No. 7F Bushing for $\frac{1}{4}$ inch I. P. Tap, doz. D.P. 1.60
 No. 16F Bushing for $\frac{3}{8}$ inch I. P. Tap, doz. D.P. 2.44



8 F



9 F

- No. 8F Connector for $\frac{1}{4}$ inch I. P. Thread, doz. D.P. \$1.38
 No. 17F Connector for $\frac{1}{4}$ inch I. P. Thread, doz. D.P. 2.00
 No. 9F Elbow for $\frac{1}{8}$ inch I. P. Thread, doz. D.P. 1.60
 No. 19F Elbow for $\frac{1}{4}$ inch I. P. Thread, doz. D.P. 2.00



27 F



28 F

- No. 27F Tee for $\frac{1}{8}$ inch I. P. Thread, doz. D.P. \$1.88
 No. 30F Tee for $\frac{1}{4}$ inch I. P. Thread, doz. D.P. 2.44
 No. 28F Tee for $\frac{1}{8}$ inch I. P. Thread, doz. D.P. 1.88
 No. 29F Tee for $\frac{1}{4}$ inch I. P. Thread, doz. D.P. 2.44

Directions for using: Place nut on tubing and then flare out the end of tubing, as shown by Cuts 1 F and 10 F.

PIPE FITTINGS—UNFINISHED

For Connecting Iron Pipe Size Tubing



100



101



102

- | | | |
|--------------------------|--------------------------|-------------|
| No. 100 Elbow | $\frac{1}{8}$ inch, doz. | D.P. \$2.00 |
| No. 100 Elbow | $\frac{1}{4}$ inch, doz. | D.P. 2.44 |
| No. 100 Elbow | $\frac{3}{8}$ inch, doz. | D.P. 3.11 |
| No. 100 Reducing Elbow | $\frac{1}{4}$ inch, doz. | D.P. 3.11 |
| No. 100 Reducing Elbow | $\frac{3}{8}$ inch, doz. | D.P. 3.88 |
| No. 101 Tee | $\frac{1}{8}$ inch, doz. | D.P. 2.22 |
| No. 101 Tee | $\frac{1}{4}$ inch, doz. | D.P. 2.66 |
| No. 101 Reducing Tee | $\frac{1}{4}$ inch, doz. | D.P. 3.88 |
| No. 101 Reducing Tee | $\frac{3}{8}$ inch, doz. | D.P. 4.44 |
| No. 102 Crosses | $\frac{1}{8}$ inch, doz. | D.P. 3.11 |
| No. 102 Crosses | $\frac{1}{4}$ inch, doz. | D.P. 4.88 |
| No. 102 Crosses | $\frac{3}{8}$ inch, doz. | D.P. 6.11 |
| No. 102 Reducing Crosses | $\frac{1}{4}$ inch, doz. | D.P. 5.77 |



103



104



105

- | | | |
|------------------------------|--------------------------|-------------|
| No. 103 Couplings | $\frac{1}{8}$ inch, doz. | D.P. \$1.60 |
| No. 103 Couplings | $\frac{1}{4}$ inch, doz. | D.P. 2.22 |
| No. 103 Couplings, R & L | $\frac{1}{4}$ inch, doz. | D.P. 2.22 |
| No. 103 Couplings, R & L | $\frac{3}{8}$ inch, doz. | D.P. 2.44 |
| No. 103 Coupling Reducings | $\frac{1}{4}$ inch, doz. | D.P. 2.22 |
| No. 104 Unions, Ground Joint | $\frac{1}{8}$ inch, doz. | D.P. 3.00 |
| No. 104 Unions, Ground Joint | $\frac{1}{4}$ inch, doz. | D.P. 3.33 |
| No. 104 Unions, Ground Joint | $\frac{3}{8}$ inch, doz. | D.P. 3.88 |
| No. 105 Return Bends, Open | $\frac{1}{8}$ inch, doz. | D.P. 6.11 |
| No. 105 Return Bends, Closed | $\frac{3}{8}$ inch, doz. | D.P. 4.44 |



110



111



109



108

- | | | |
|-------------------|--------------------------|-------------|
| No. 110 Bushings | $\frac{1}{4}$ inch, doz. | D.P. \$1.60 |
| No. 110 Bushings | $\frac{3}{8}$ inch, doz. | D.P. 1.66 |
| No. 111 Lock Nuts | $\frac{1}{4}$ inch, doz. | D.P. 1.60 |
| No. 111 Lock Nuts | $\frac{3}{8}$ inch, doz. | D.P. 1.73 |
| No. 109 Plugs | $\frac{1}{8}$ inch, doz. | D.P. 1.33 |
| No. 109 Plugs | $\frac{1}{4}$ inch, doz. | D.P. 1.60 |
| No. 109 Plugs | $\frac{3}{8}$ inch, doz. | D.P. 1.77 |
| No. 108 Caps | $\frac{1}{8}$ inch, doz. | D.P. 2.00 |
| No. 108 Caps | $\frac{1}{4}$ inch, doz. | D.P. 2.00 |
| No. 108 Caps | $\frac{3}{8}$ inch, doz. | D.P. 2.77 |



112



116

- | | | |
|----------------------|--------------------------|-------------|
| No. 112 Nipple Close | $\frac{1}{8}$ inch, doz. | D.P. \$0.77 |
| No. 112 Nipple Close | $\frac{1}{4}$ inch, doz. | D.P. 1.22 |
| No. 116 Tee Elbow | $\frac{1}{8}$ inch, doz. | D.P. 3.55 |
| No. 116 Street Elbow | $\frac{1}{4}$ inch, doz. | D.P. 4.44 |



COILS

Kingston Plain Box Coil



Four-Terminal Box Coil

to give the best possible results. For Plain Box Coils we can bring the different terminals out at almost any position users may require them.

Kingston single-cylinder Box Coil, each.....\$4.50
Each...D.P. \$7.55

Kingston double-cylinder Box Coil, each..... 9.00
Each...D.P. \$15.00

Kingston Dash Coil

Kingston single-cylinder Dash Coil, with switch,
each.....\$7.50
Each...D.P. \$12.50

Kingston double-cylinder Dash Coil, with switch,
each..... 13.50
Each...D.P. \$22.48

Kingston quadruple-cylinder Dash Coil, with
switch, each..... 25.50
Each...D.P. \$42.50

Heinze Box Coils



Heinze 1-cylinder Marine
Coil, style B-18, price...\$5.00
Each...D.P. \$7.77

Heinze 2-cylinder Marine
Coil, style B-17, price...10.00
Each...D.P. \$15.55

Heinze Dash Coils



Heinze single unit Dash Coil, type B-40, price....\$10.00
Each...D.P. \$15.55

Heinze two unit Dash Coil, type B-36, price.... 15.00
Each...D.P. \$23.33

Heinze four unit Dash Coil, type B-35, price.... 28.00
Each...D.P. \$43.55

Extra units, each..... 5.60
Each...D.P. \$8.70

For stationary gas engine and boat use, where finish is not required, we recommend our plain Box Coils. This type of coil is made of the same high grade materials, put up in neat lock cornered boxes, polished brass trimmings, and are guaranteed

On quantity orders for Plain Box Coils we can bring the different terminals out at almost any position users may require them.

Splitdorf Box Type



Splitdorf 1-cylinder Box Coil, each.....\$10.00
Each...D.P. \$14.82

Splitdorf 2-cylinder Box Coil, each..... 20.00
Each...D.P. \$29.66

Splitdorf 4-cylinder Box Coil, each..... 40.00
Each...D.P. \$59.26

Splitdorf Dash Coils



For automobile and marine ignition, Splitdorf Coils, by reason of their marked efficiency, economy and durability, have long been the favored spark device. Made of the very best material and by the best workmanship obtainable.

1-cylinder Dash Coil, in oak or mahogany case,
price.....\$12.50
Each...D.P. \$18.50

2-cylinder Dash Coil, in oak or mahogany case,
price..... 22.50
Each...D.P. \$33.33

4-cylinder Dash Coil, in oak or mahogany case,
price..... 45.00
Each...D.P. \$66.66

Units only, price..... 10.00
Each...D.P. \$14.82

Model "TS" Splitdorf Coil



Model "TS" Coil — the latest and most finished of all types of coils — is notable for its ideal firing qualities and general construction. Easily and quickly dissembled, it is positive in action and its durability is one of its striking features. The coil proper is mounted on the base of the switch, the face of which is designed to mount on the dash-

board, where it is controlled by hand or foot. The coil is enclosed in a light waterproof case and extends through the dashboard.

T. S. A. Splitdorf Coil for use with A Magneto,
each.....\$22.50
Each...D.P. \$33.33

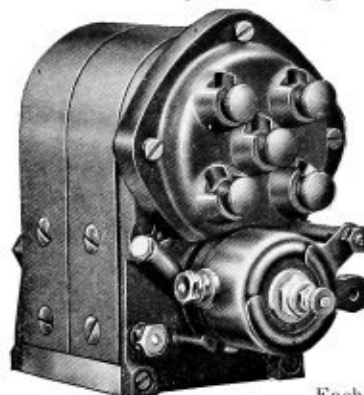
T. S. F. Splitdorf Coil for use with models having
2 Magnets, each..... 22.50
Each...D.P. \$33.33

T. S. B. Splitdorf Coil for use with models having
3 Magnetos, each..... 22.50
Each...D.P. \$33.33



MAGNETOS

Splitdorf Magnetos

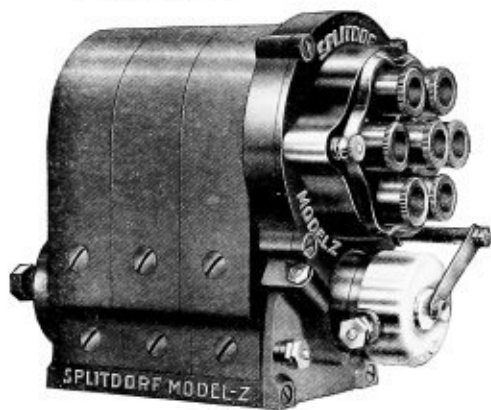


Model A Magneto

This model has been developed for use on all of the standard 4 cylinder motors so far offered, and is interchangeable with all standard magnetos, without the necessity of making special couplings.

Price, including Model "TSA" Transformer... \$60.00

Each... D.P. \$88.88



Model Z Magneto

A six-cylinder type suitable for the very heaviest slow speed motors, and has the same strong magnetic field as our Model W (4 cylinder), having six magnets in three pairs, and has the same general dimensions.

Price, including Model "TSB" Coil, each... \$105.00
Each... D.P. \$166.66.

Milwaukee Timers

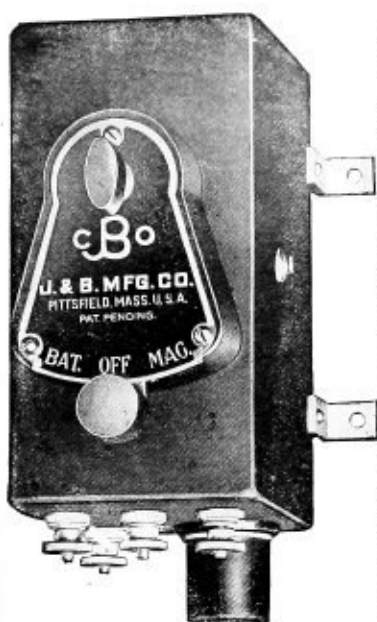


Milwaukee Timers are of the self-adjustable roller type. Are made dust-proof and are all-over lathe finished with the greatest possible care. The success with which these timers have met enables the manufacturers to offer them as the best electrical ignition for jump spark system on the market. Over 50,000 of these timers are in daily use.

Milwaukee Timers, single-cylinder, each... \$3.60
Each... D.P. \$5.33
Milwaukee Timers, 2-cylinder, each... 3.80
Each... D.P. \$5.77
Milwaukee Timers, 3-cylinder, each... 4.00
Each... D.P. \$6.00
Milwaukee Timers, 4-cylinder, each... 4.20
Each... D.P. \$6.22
Milwaukee Timers, 2-cylinder Buick, each... 4.80
Each... D.P. \$7.10

COILS

J & B Transformer Coil



To be used in connection with all makes of low tension magnetos.

This coil can be used in connection with any make of low tension magneto. The aim has been to construct a coil to increase the efficiency of low tension magneto transformer ignition systems. This coil draws very little current from the batteries or magneto armature, which means easy starting, running slow on high-gear and longer life to platinum points, as we have ample condenser capacity to overcome the arcing at the points.

The windings are well insulated

which eliminates any chance of short circuits in the coil. This coil is provided with a safety gap, which overcomes the possibility of breaking down the secondary winding.

A starting button is installed on the side of the coil box and has a large pair of platinum points, which will last indefinitely.

One of the exclusive features of this coil is the fact that no wires enter the switch. All connections are made through the screws which hold the switch in place on the coil box. This overcomes all chance of short circuits caused by wires coming in contact with the switch.

All binding posts, brackets, etc., are of heavy material to withstand the most severe usage. The boxes are of heavy solid mahogany. These coils are furnished with blueprint giving specific instructions for wiring coil to all makes of low tension magnetos. This coil is guaranteed for life.

Each... \$16.00
Each... D.P. \$22.22.

J & B Magneto Kick Switch



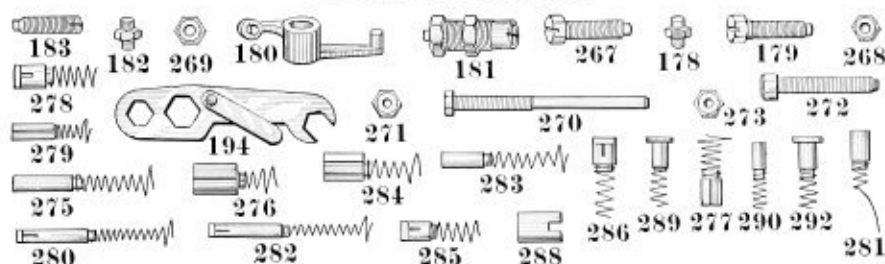
For controlling magneto and battery circuits where double system, with two sets of spark plugs, is employed. Switch has small cut-out lever with removable key, and will withstand the most severe service. This switch is also furnished for two batteries.

Price... \$2.00
Each... D.P. \$3.10



PLATINUM CONTACTS—Continued

Fit Eisemann Magnetos



178 Short Platinum Screw, Em, EU, EA, ED, EL, each	\$1.95
Each..D.P. \$2.22 Dozen..D.P. \$24.00	
179 Adj. Platinum Screw, EM, EB, EU, EA, ED, EL, ER, each	1.95
Each..D.P. \$2.22 Dozen..D.P. \$24.00	
180 Contact Lever with Platinum A7, each	4.50
Each..D.P. \$5.00 Dozen..D.P. \$55.55	
181 Lower Platinum Contact Screw A7, each	3.00
Each..D.P. \$3.33 Dozen..D.P. \$36.00	
182 Short Platinum Screw, A6, A8, BK, BL, each	1.95
Each..D.P. \$2.22 Dozen..D.P. \$24.00	
183 Adj. Platinum Screw, Type A6, A8, BK, BL, each	1.95
Each..D.P. \$2.22 Dozen..D.P. \$24.00	
194 Adj. Wrench with gauge, each	.15
Each..D.P. \$0.18 Dozen..D.P. \$1.90	
267 Adj. Platinum Contact Screw Bat. Breaker, EM, each	1.95
Each..D.P. \$2.22 Dozen..D.P. \$24.00	
268 Lock Nut for Nos. 267, 179, each	.05
Each..D.P. \$0.07 Dozen..D.P. \$0.66	
269 Lock Nut for 183, each	.05
Each..D.P. \$0.07 Dozen..D.P. \$0.66	
270 Adj. Platinum Screw Bat. Breaker, EL, EA, EU, ED, each	2.40
Each..D.P. \$2.66 Dozen..D.P. \$29.33	
271 Lock Nut for No. 270, each	.05
Each..D.P. \$0.07 Dozen..D.P. \$0.66	
272 Adj. Platinum Contact Screw for ED, ER, each	1.95
Each..D.P. \$2.22 Dozen..D.P. \$24.00	
273 Lock Nut for No. 272, each	.05
Each..D.P. \$0.07 Dozen..D.P. \$0.66	

Brushes for EM, 4 and 6 cyl. Single and Dual—

274 Carbon Brush for Distr. No. 6536, 4 cyl., only, each	\$0.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
275 Brush for Holder No. 6785 for slip ring, each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
276 Br. for H. T. Distr. arm No. 6536, 9060, 61, 62, 63, each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
277 Br. for Distr. Plate Nos. 6796, 6797, 6943, each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
278 Ground Car. Br. with Spr. and Holder for M. & B., each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	

279 Carbon Br. for Brass Cond. No. 6828, 4 cyl., each	\$0.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
280 Carbon with Holder for Cond. Bridge No. 9358, each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	

Brushes for Type EB—

276 Carbon Brush for Distr. Lever No. 7379, each	\$0.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
277 Carbon Brush for Distr. Plate No. 7380, each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
281 Carbon Ground Br. for Dust Cover No. 7241B, each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	

Brushes for EA-EU-ED. Single and Dual—

282 Carbon Br. for H. T. Cond. Rod No. 3510, each	\$0.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
283 Carbon Br. for H. T. Carbon Holder Nos. 3514, 6117, each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
284 Carbon Br. for Distr. Arm Nos. 5080, 5083, each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
285 Earth Return Carbon for M. & B., each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
286 Carbon Brush for Distr. Plate Cover No. 6115, each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	

Brushes for A6, A7, A8, BL—

287 L. T. Carbon Brush No. 2274, A8, each	\$0.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
288 L. T. Carbon Brush No. 334, A7, A6, each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
289 Steel Brush No. 1569 for Distr. Finger, A7, A8, each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
290 Carbon Contact No. 1571 for H. T. Distr., A7, A8, each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
291 Carbon Contact No. 12 for H. T. Distr., A6, each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	
292 Steel Brush No. 2396 for Distr. Finger BL, each	.18
Each..D.P. \$0.20 Dozen..D.P. \$2.22	



PLATINUM CONTACTS

Fit Bosch Automobile Magneto



97 Switch Key, Dual Coil, each.....	\$0.12
Each..D.P. \$.13 Dozen..D.P. \$1.44	
99 Short Platinum Screw, Mag. Breaker, each..	1.72
Each..D.P. \$1.88 Dozen..D.P. \$21.33	
100 Long Platinum Screw, Mag. Breaker, each..	1.72
Each..D.P. \$1.88 Dozen..D.P. \$21.33	
103 Short Platinum Screw, Bat. Breaker, each..	2.25
Each..D.P. \$2.55 Dozen..D.P. \$28.88	
104 Long Platinum Screw, Bat. Breaker, each..	2.25
Each..D.P. \$2.55 Dozen..D.P. \$28.88	
112 Adj. Wrench with gauge, each.....	.12
Each..D.P. \$0.13 Dozen..D.P. \$1.44	
329 Switch Key for Plain Switch, each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	

Brushes with Springs, Type DU-D-DR—

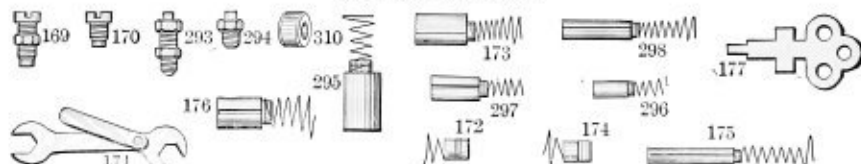
143 Carbon Br. for grounding Interrupter, each..	\$0.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
145 Distr. Br. for Holder 15a, each.....	.23
Each..D.P. \$0.26 Dozen..D.P. \$3.00	

146 Distr. Br. for Holder 133b, each.....	\$0.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
147 Distr. Br. for Holder 14a, each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
148 Carbon Br. for Holders 12a, 127b, 11b, each..	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
149 Carbon Br. for Holder on Bridge No. 12, each..	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	

Brushes with Springs for ZR—

143 Carbon Br. for Grounding Interrupter, each..	\$0.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
144 Ground Carbon Br. No. 82, each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
151 Carbon Br. for Br. Holder No. 30, each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
152 Carbon Br. for Connecting Piece No. 31, each..	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
153 Distr. Br. for Holders Nos. 234, 235, each..	.23
Each..D.P. \$0.26 Dozen..D.P. \$3.00	

Fit Mea Magneto



169 Long Platinum Screw, each.....	\$1.80
Each..D.P. \$2.00 Dozen..D.P. \$21.55	
170 Short Platinum Screw, each.....	1.80
Each..D.P. \$2.00 Dozen..D.P. \$21.55	
171 Adj. Wrench with gauge, each.....	.12
Each..D.P. \$0.13 Dozen..D.P. \$1.44	
172 Carbon Brush for Breaker Box, each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
173 Radial Distr. Brush BH, BK, 4 and 6 cyl., each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
174 Axial Collector Br. BH, BK, 4 and 6 cyl., each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
175 H. T. Collector Brush, 4 and 6 cyl., each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
176 L. T. Ground Brush, 4 and 6 cyl., each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	

177 Switch Key, each.....	\$0.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
293 Long Platinum Screw, New Type A, each..	1.80
Each..D.P. \$2.00 Dozen..D.P. \$21.55	
294 Short Platinum Screw, New Type A, each..	1.80
Each..D.P. \$2.00 Dozen..D.P. \$21.55	
295 Radial Distr. Brush A, 4 cyl., each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
296 Axial Collector Brush A, 4 cyl., each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
297 Axial Collector Brush BH, BK, 6 cyl., each..	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
298 Axial Collector Brush A, 6 cyl., each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
310 Fibre Roller, Type ABC, each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	



PLATINUM CONTACTS

Fit Simms Magnetos



145 Carbon Distr. Brush, each.....	\$0.38
Each..D.P. \$0.44 Dozen..D.P. \$4.80	
166 Adj. Wrench with gauge, each.....	.12
Each..D.P. \$0.15 Dozen..D.P. \$1.66	
167 Short Platinum Screw, each.....	1.80
Each..D.P. \$2.00 Dozen..D.P. \$21.55	
168 Long Platinum Screw, each.....	1.80
Each..D.P. \$2.00 Dozen..D.P. \$21.55	
195 Switch Key, each.....	.06
Each..D.P. \$0.07 Dozen..D.P. \$0.66	
322 Carbon Br. for Central Carb. Holder, each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
323 Carbon Brush for M. & B., each.....	.38
Each..D.P. \$0.44 Dozen..D.P. \$4.80	
324 Ground Carbon Brush, each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	

Fit Kingston Magnetos



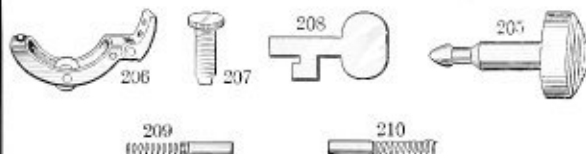
227 Breaker Bar, each.....	\$3.00
Each..D.P. \$3.33 Dozen..D.P. \$36.00	
228 Breaker Screw, each.....	1.80
Each..D.P. \$2.00 Dozen..D.P. \$21.55	
229 Carbon Brush, each.....	.12
Each..D.P. \$0.13 Dozen..D.P. \$1.44	
230 Gauze Brush, each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
96 Switch Key, each.....	.08
Each..D.P. \$0.09 Dozen..D.P. \$1.00	
227PP Platinum Point only, each.....	1.50
Each..D.P. \$1.66 Dozen..D.P. \$18.00	

Fit Michigan Magnetos



219 Platinum Breaker Bar (new), each.....	\$3.75
Each..D.P. \$4.22 Dozen..D.P. \$46.66	
220 Platinum Breaker Screw, each.....	1.65
Each..D.P. \$1.77 Dozen..D.P. \$19.33	
221 Cam, each.....	1.50
Each..D.P. \$1.66 Dozen..D.P. \$18.00	
222 Switch Key, each.....	.12
Each..D.P. \$0.15 Dozen..D.P. \$1.66	
223 Adj. Wrench with gauge, each.....	.12
Each..D.P. \$0.15 Dozen..D.P. \$1.66	
224 Switch Plug, each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
225 Carbon Brush, each.....	.12
Each..D.P. \$0.15 Dozen..D.P. \$1.66	
226 Gauze Brush, each.....	.12
Each..D.P. \$0.15 Dozen..D.P. \$1.66	
237 Platinum Breaker Bar (old), each.....	3.00
Each..D.P. \$3.33 Dozen..D.P. \$36.66	
219PP Platinum Point only, each.....	1.50
Each..D.P. \$1.66 Dozen..D.P. \$18.00	

Fit National Magnetos

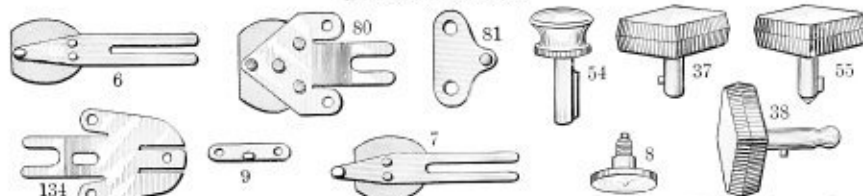


205 Switch Plug (top), each.....	\$0.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
206 Interrupter Bar, each.....	3.75
Each..D.P. \$4.22 Dozen..D.P. \$46.66	
207 Interrupter Screw, each.....	1.80
Each..D.P. \$2.00 Dozen..D.P. \$21.55	
208 Switch Key, each.....	.15
Each..D.P. \$0.17 Dozen..D.P. \$2.00	
209 Carbon Brush, each.....	.11
Each..D.P. \$0.13 Dozen..D.P. \$1.44	
210 Gauze Brush, each.....	.11
Each..D.P. \$0.13 Dozen..D.P. \$1.44	
206PP Platinum Point only, each.....	1.50
Each..D.P. \$1.66 Dozen..D.P. \$18.00	



PLATINUM CONTACTS

Fit Heinze Coils

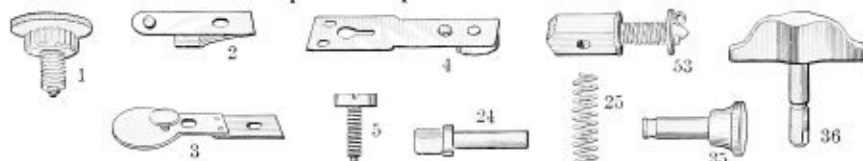


6 Platinum Spring, each.....	\$0.50
Each, D.P. \$1.00 Dozen, D.P. \$11.10	
7 Platinum Spring, each.....	.50
Each, D.P. \$1.00 Dozen, D.P. \$11.10	
8 Platinum Screw, each.....	.50
Each, D.P. \$1.00 Dozen, D.P. \$11.10	
9 Platinum Bridge, each.....	.60
Each, D.P. \$0.60 Dozen, D.P. \$7.54	

37 Switch Plug, each.....	\$0.06
Each, D.P. \$0.07 Dozen, D.P. \$0.66	
38 Switch Plug, each.....	.06
Each, D.P. \$0.07 Dozen, D.P. \$0.66	
54 Switch Plug, each.....	.08
Each, D.P. \$0.09 Dozen, D.P. \$1.00	

55 Switch Plug, each.....	\$0.08
Each, D.P. \$0.09 Dozen, D.P. \$1.00	
80 Platinum Spring, each.....	.75
Each, D.P. \$0.84 Dozen, D.P. \$9.32	
81 Platinum Bridge, each.....	.60
Each, D.P. \$0.60 Dozen, D.P. \$7.44	
134 Platinum Spring, each.....	.60
Each, D.P. \$0.60 Dozen, D.P. \$7.44	

Fit Splitdorf Spark Coils and Timer

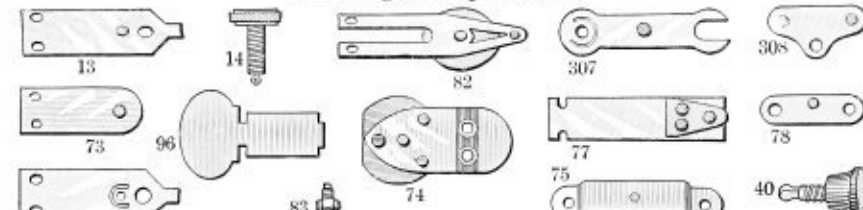


1 Platinum Screw, each.....	\$0.00
Each, D.P. \$1.00 Dozen, D.P. \$12.00	
2 Platinum Spring, each.....	.60
Each, D.P. \$0.60 Dozen, D.P. \$7.44	
3 Hammer Spring, each.....	.15
Each, D.P. \$0.15 Dozen, D.P. \$1.88	
4 Platinum Spring, each.....	.90
Each, D.P. \$1.00 Dozen, D.P. \$10.88	

5 Platinum Screw, each.....	\$0.50
Each, D.P. \$1.00 Dozen, D.P. \$10.88	
24 Timer Plunger Contact, each.....	.08
Each, D.P. \$0.09 Dozen, D.P. \$1.00	
25 Timer Plunger Contact Spring, each.....	.05
Each, D.P. \$0.07 Dozen, D.P. \$0.66	

35 Switch Plug, each.....	\$0.05
Each, D.P. \$0.07 Dozen, D.P. \$0.66	
36 Switch Plug, each.....	.06
Each, D.P. \$0.08 Dozen, D.P. \$0.74	
53 Timer Contact Block, each.....	.45
Each, D.P. \$0.52 Dozen, D.P. \$5.54	

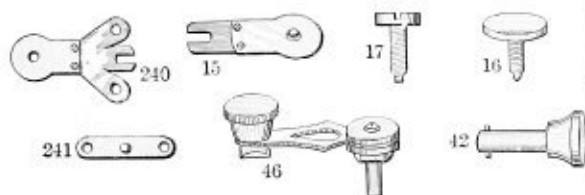
Fit Kingston Spark Coils





PLATINUM CONTACTS

Fit Pittsfield Coils



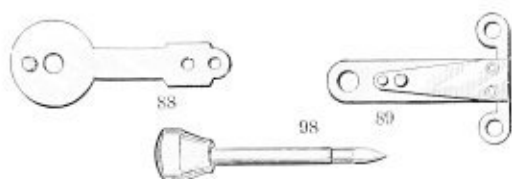
15 Platinum Spring, each.....	\$0.90
Each..D.P. \$1.00 Dozen..D.P. \$10.88	
16 Platinum Screw, 10/32 thread, each.....	.90
Each..D.P. \$1.00 Dozen..D.P. \$10.88	
17 Platinum Screw, 10/40 thread, each.....	.90
Each..D.P. \$1.00 Dozen..D.P. \$10.88	
42 Switch Plug, each.....	.06
Each..D.P. \$0.07 Dozen..D.P. \$0.66	
46 Switch Lever, each.....	.26
Each..D.P. \$0.28 Dozen..D.P. \$3.10	
240 Platinum Spring, new style, each.....	1.05
Each..D.P. \$1.16 Dozen..D.P. \$13.33	
241 Platinum Bridge, new style, each.....	.75
Each..D.P. \$0.84 Dozen..D.P. \$9.32	

Fit Atwater-Kent System



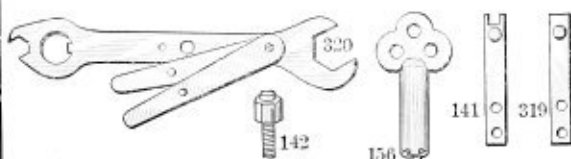
58 Contact Screw (old style).....	\$0.75
Each..D.P. \$0.84 Dozen..D.P. \$9.32	
61 Contact Spring (old style).....	.60
Each..D.P. \$0.66 Dozen..D.P. \$7.44	
62 Contact Screw (new style).....	.75
Each..D.P. \$0.84 Dozen..D.P. \$9.32	
63 Contact Spring (new style).....	.60
Each..D.P. \$0.66 Dozen..D.P. \$7.44	
64 Switch Plug.....	.12
Each..D.P. \$0.14 Dozen..D.P. \$1.44	
325 Contact Screw, type K-2.....	.90
Each..D.P. \$1.00 Dozen..D.P. \$10.88	
326 Contact Spring, type K-2.....	1.80
Each..D.P. \$2.00 Dozen..D.P. \$21.56	
327 Lower Contact Spring, type K.....	1.80
Each..D.P. \$2.00 Dozen..D.P. \$21.56	
328 Upper Contact Spring, type K.....	1.80
Each..D.P. \$2.00 Dozen..D.P. \$21.56	

Fit K-W Spark Coil



88 Bottom Spring, each.....	\$0.60
Each..D.P. \$0.66 Dozen..D.P. \$7.44	
89 Top Spring, each.....	.75
Each..D.P. \$0.84 Dozen..D.P. \$9.32	
98 Switch Plug, each.....	.11
Each..D.P. \$0.14 Dozen..D.P. \$1.44	

Fit Delco Ignition System



141 Contact Spring, 1912, 13, 14, each.....	\$2.25
Each..D.P. \$2.56 Dozen..D.P. \$28.00	
142 Contact Screw, 1912, 13, 14, 15, each.....	1.80
Each..D.P. \$2.00 Dozen..D.P. \$21.56	
156 Switch Key, each.....	.23
Each..D.P. \$0.26 Dozen..D.P. \$2.88	
319 Contact Spring, 1915, each.....	1.95
Each..D.P. \$2.22 Dozen..D.P. \$24.00	
320 Adj. Wrench with gauges, each.....	.38
Each..D.P. \$0.44 Dozen..D.P. \$4.75	

Fit American Electric Fuse and Detroit Coil

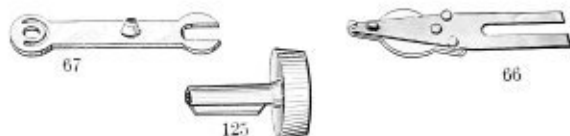


316 Platinum Contact Screw, each.....	\$0.90
Each..D.P. \$1.00 Dozen..D.P. \$10.88	
317 Platinum Vibrator Spring, each.....	1.05
Each..D.P. \$1.16 Dozen..D.P. \$13.33	
318 Platinum Screw for Bridge, each.....	.90
Each..D.P. \$1.00 Dozen..D.P. \$10.88	



PLATINUM CONTACTS

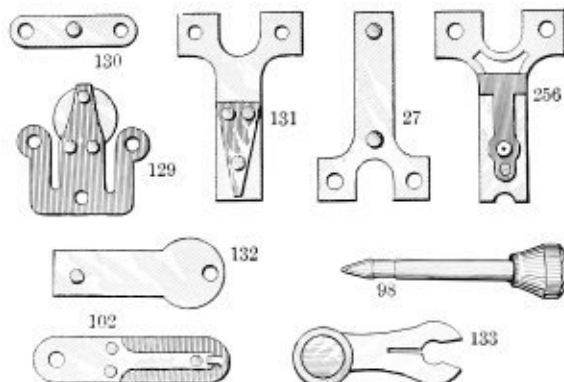
Fit J. & B. Spark Coil



66	Platinum Spring, each.....	\$1.05
Each..	D.P. \$1.16 Dozen..	D.P. \$13.33
67	Platinum Bridge, each.....	1.00
Each..	D.P. \$1.10 Dozen..	D.P. \$12.22
125	Switch Plug, each.....	.09
Each..	D.P. \$0.12 Dozen..	D.P. \$1.10

Fit N. Y. Master Vibrators and Spark Coils

For Master Vibrators



102M	Bottom Spring, each.....	\$1.80
Each..	D.P. \$2.00 Dozen..	D.P. \$21.56
129M	Bottom Spring, each.....	1.80
Each..	D.P. \$2.00 Dozen..	D.P. \$21.56
130M	Bridge, each.....	1.50
Each..	D.P. \$1.66 Dozen..	D.P. \$18.00
131M	Top Spring, each.....	1.80
Each..	D.P. \$2.00 Dozen..	D.P. \$21.56
132M	Bottom Spring, each.....	1.80
Each..	D.P. \$2.00 Dozen..	D.P. \$21.56
256M	Top Spring, each.....	1.80
Each..	D.P. \$2.00 Dozen..	D.P. \$21.56
98	Kick Switch Plug, each.....	.11
Each..	D.P. \$0.14 Dozen..	D.P. \$1.44
133	Switch Lever, each.....	.14
Each..	D.P. \$0.16 Dozen..	D.P. \$1.66

For New York Spark Coils

27C	Top Spring, each.....	\$1.00
Each..	D.P. \$1.10 Dozen..	D.P. \$12.00
130C	Bridge, each.....	.75
Each..	D.P. \$0.84 Dozen..	D.P. \$9.32
131C	Top Spring, each.....	1.00
Each..	D.P. \$1.10 Dozen..	D.P. \$12.00
132C	Bottom Spring, each.....	.90
Each..	D.P. \$1.00 Dozen..	D.P. \$10.88
256C	Top Spring, each.....	1.00
Each..	D.P. \$1.10 Dozen..	D.P. \$12.00

Fit Rhoades Unit Spark System

334	Platinum Contact Spring, each.....	\$1.50
Each..	D.P. \$1.66 Dozen..	D.P. \$18.00
335	Platinum Contact Screw, each.....	1.50
Each..	D.P. \$1.66 Dozen..	D.P. \$18.00

Fit N. Y. Uni-Coil

336	Platinum Contact Spring, each.....	\$1.50
Each..	D.P. \$1.66 Dozen..	D.P. \$18.00
337	Platinum Contact Screw, each.....	1.50
Each..	D.P. \$1.66 Dozen..	D.P. \$18.00

Contact Points—Genuine Platinum-Iridium

For Repointing Contact Screws and Springs

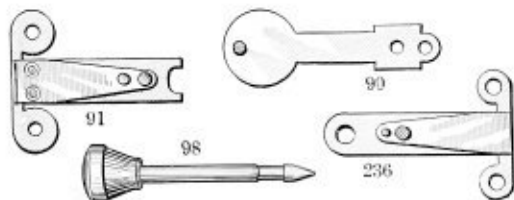


1P	For Remy Screw (old style), each.....	\$1.35
Each..	D.P. \$1.56 Dozen..	D.P. \$16.66
2P	For Remy Spring (old style), each.....	1.35
Each..	D.P. \$1.56 Dozen..	D.P. \$16.66
3P	For Vibrating Coil Springs, each.....	.70
Each..	D.P. \$0.78 Dozen..	D.P. \$8.44
4P	For Vibrating Coil Screws, each.....	.70
Each..	D.P. \$0.78 Dozen..	D.P. \$8.44
5P	For Screws, Remy, Bosch, Eisemann, etc., each	1.35
Each..	D.P. \$1.56 Dozen..	D.P. \$16.66
6P	For Springs, Remy, Bosch, Eisemann, etc., each	1.35
Each..	D.P. \$1.56 Dozen..	D.P. \$16.66
7P	For Splittorf Breaker Screws, each.....	1.50
Each..	D.P. \$1.66 Dozen..	D.P. \$18.00
8P	For Splittorf Breaker Bars, each.....	1.50
Each..	D.P. \$1.66 Dozen..	D.P. \$18.00
9P	For Splittorf Breaker Bars.....	1.60
Each..	D.P. \$1.78 Dozen..	D.P. \$20.00
10P	For Master Vibrator Screws and Springs, each.....	1.50
Each..	D.P. \$1.66 Dozen..	D.P. \$18.00
11P	For Ford Coil Screws and Springs (all makes), each.....	.70
Each..	D.P. \$0.78 Dozen..	D.P. \$8.44
12P	Special size of the very best quality suitable for any Magneto or Master Vibrator part, each.....	1.30
Each..	D.P. \$1.44 Dozen..	D.P. \$16.00



PLATINUM CONTACTS

Fit K-W Master Vibrator



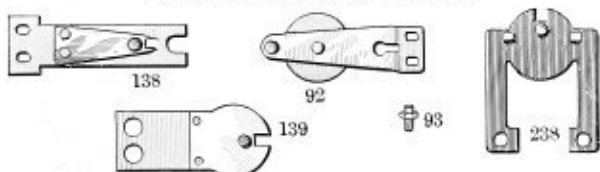
90 Bottom Spring, each.....	\$2.10
Each, D.P. \$2.34 Dozen, D.P. \$26.66	
91 Top Spring (old style), each.....	2.20
Each, D.P. \$2.44 Dozen, D.P. \$27.00	
98 Switch Plug, each.....	.11
Each, D.P. \$0.14 Dozen, D.P. \$1.44	
236 Top Spring (new style), each.....	2.20
Each, D.P. \$2.44 Dozen, D.P. \$27.00	

Fit Connecticut M. V.



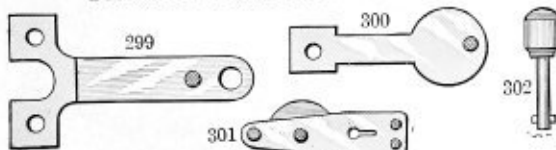
56 Bridge, each.....	\$1.50
Each, D.P. \$1.66 Dozen, D.P. \$18.00	
57 Bottom Spring, each.....	1.50
Each, D.P. \$1.66 Dozen, D.P. \$18.00	
257 Bridge, each.....	1.80
Each, D.P. \$2.00 Dozen, D.P. \$21.56	
258 Bottom Spring, each.....	1.80
Each, D.P. \$2.00 Dozen, D.P. \$21.56	
259 Switch Lever, each.....	.55
Each, D.P. \$0.62 Dozen, D.P. \$6.66	

Fit B. & S. Master Vibrator



92 Platinum Spring, each.....	\$1.80
Each, D.P. \$2.00 Dozen, D.P. \$21.56	
93 Platinum Screw, each.....	1.65
Each, D.P. \$1.88 Dozen, D.P. \$21.10	
138 Platinum Spring (top), each.....	1.80
Each, D.P. \$2.00 Dozen, D.P. \$21.56	
139 Platinum Spring (bottom), each.....	1.80
Each, D.P. \$2.00 Dozen, D.P. \$21.56	
234 Platinum Spring (new), each.....	1.50
Each, D.P. \$2.16 Dozen, D.P. \$23.88	

Fit R. C. Wells Master Vibrator



299 M. V. Bridge, each.....	\$1.95
Each, D.P. \$2.22 Dozen, D.P. \$24.00	
300 M. V. Bottom Spring, 1914, each.....	1.65
Each, D.P. \$1.88 Dozen, D.P. \$21.33	
301 M. V. Bottom Spring, 1913, each.....	1.90
Each, D.P. \$2.10 Dozen, D.P. \$23.33	
302 Switch Key, each.....	.11
Each, D.P. \$0.14 Dozen, D.P. \$1.44	

Fit Gibson Quality General Purpose Vibrator



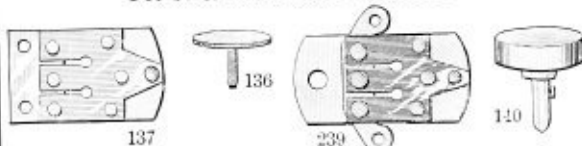
No. 130M. Bridge, each.....	\$1.50
Each, D.P. \$1.66 Dozen, D.P. \$18.00	
No. 102M. Bottom Spring, each.....	1.80
Each, D.P. \$2.00 Dozen, D.P. \$21.56	

Fit Gibson Quality High Duty Vibrator



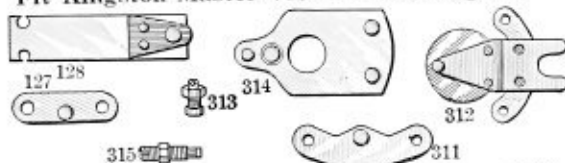
No. 131M. Top Spring, each.....	\$1.80
Each, D.P. \$2.00 Dozen, D.P. \$21.56	
No. 132M. Bottom Spring, each.....	1.80
Each, D.P. \$2.00 Dozen, D.P. \$21.56	

Fit J. & B. Master Vibrator



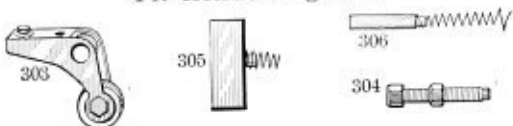
136 Contact Screw, each.....	\$1.50
Each, D.P. \$1.66 Dozen, D.P. \$18.00	
137 Vibrator Spring, each.....	1.50
Each, D.P. \$1.66 Dozen, D.P. \$18.00	
140 Switch Plug, each.....	.08
Each, D.P. \$0.09 Dozen, D.P. \$1.00	
239 Vibrator Spring (new style), each.....	1.50
Each, D.P. \$1.66 Dozen, D.P. \$18.00	

Fit Kingston Master Vibrator and Magneto



127 M. V. Bridge, 1911 type, each.....	\$2.20
Each, D.P. \$2.44 Dozen, D.P. \$26.66	
128 M. V. Bottom Spring, 1911 type, each.....	2.20
Each, D.P. \$2.44 Dozen, D.P. \$26.66	
311 M. V. Bridge, 1912 type, each.....	2.20
Each, D.P. \$2.44 Dozen, D.P. \$26.66	
312 M. V. Bottom Spring, 1912 type, each.....	2.25
Each, D.P. \$2.56 Dozen, D.P. \$28.00	
313 M. V. Screw for Bridge, 1913 type.....	2.25
Each, D.P. \$2.56 Dozen, D.P. \$28.00	
314 Magneto Contact Spring, each.....	2.65
Each, D.P. \$3.00 Dozen, D.P. \$33.33	
315 Magneto Contact Screw, 1914, each.....	1.90
Each, D.P. \$2.10 Dozen, D.P. \$23.33	

Fit Heinze Magnets

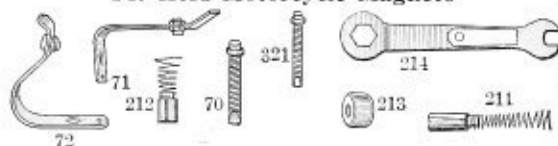


303 Platinum Breaker Bar, each.....	\$2.35
Each, D.P. \$2.56 Dozen, D.P. \$28.00	
304 Platinum Breaker Screw, each.....	1.80
Each, D.P. \$2.00 Dozen, D.P. \$21.56	
305 Distributor Carbon Brush, each.....	.22
Each, D.P. \$0.24 Dozen, D.P. \$2.66	
306 Carbon Brush for M. & B., each.....	.30
Each, D.P. \$0.34 Dozen, D.P. \$3.78	
111 Adj. Wrench (Use Bosch No. 111), each.....	.15
Each, D.P. \$0.18 Dozen, D.P. \$1.88	



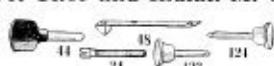
PLATINUM SCREWS, SPRINGS AND BRUSHES

Fit Herz Motorcycle Magneto



70 Platinum Screw	.....	\$1.50
Each..D.P. \$1.66	Dozen..D.P. \$18.00	
71 Platinum Spring	.....	1.65
Each..D.P. \$1.88	Dozen..D.P. \$21.11	
72 Platinum Spring	.....	1.65
Each..D.P. \$1.88	Dozen..D.P. \$21.11	
211 Secondary Carbon Brush	.....	.15
Each..D.P. \$0.18	Dozen..D.P. \$1.88	
212 Primary Carbon Brush	.....	.15
Each..D.P. \$0.18	Dozen..D.P. \$1.88	
213 Fibre Roller	.....	.15
Each..D.P. \$0.18	Dozen..D.P. \$1.88	
214 Adj. Wrench, with gauge	.....	.15
Each..D.P. \$0.18	Dozen..D.P. \$1.88	
321 Platinum Screw, new style	.....	1.50
Each..D.P. \$1.66	Dozen..D.P. \$18.00	

Fit Thor and Indian M. C.



34 Platinum Screw	.....	\$0.75
Each..D.P. \$0.84	Dozen..D.P. \$9.33	
44 Switch Plug	.....	.05
Each..D.P. \$0.07	Dozen..D.P. \$0.66	
48 Platinum Spring	.....	.90
Each..D.P. \$1.00	Dozen..D.P. \$10.88	
123 Switch Plug "1910"	.....	.05
Each..D.P. \$0.07	Dozen..D.P. \$0.66	
124 Switch Plug "1911"	.....	.05
Each..D.P. \$0.07	Dozen..D.P. \$0.66	

Fit Excelsior Motorcycle



68 Platinum Screw	.....	\$0.75
Each..D.P. \$0.84	Dozen..D.P. \$9.33	
69 Platinum Spring	.....	.75
Each..D.P. \$0.84	Dozen..D.P. \$9.33	
43 Switch Plug	.....	.06
Each..D.P. \$0.09	Dozen..D.P. \$0.88	

Fit Reading-Std. M. C.



119 Platinum Screw	.....	\$0.90
Each..D.P. \$1.00	Dozen..D.P. \$10.88	
120 Platinum Spring	.....	.90
Each..D.P. \$1.00	Dozen..D.P. \$10.88	

Fit Harley-Dav. M. C.



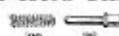
32 Platinum Screw	.....	\$0.75
Each..D.P. \$0.84	Dozen..D.P. \$9.33	
33 Platinum Spring	.....	.75
Each..D.P. \$0.84	Dozen..D.P. \$9.33	
126 Switch Plug	.....	.05
Each..D.P. \$0.07	Dozen..D.P. \$0.66	

Fit Yale Motorcycle



121 Platinum Screw, each	.....	\$0.75
Each..D.P. \$0.84	Dozen..D.P. \$9.33	
122 Platinum Spring, each	.....	.90
Each..D.P. \$1.00	Dozen..D.P. \$10.88	

Fit Herz Timers



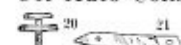
28 Plunger Contact, each	.....	\$0.08
Each..D.P. \$0.09	Dozen..D.P. \$1.00	
29 Plunger Contact Spring, each	.....	.65
Each..D.P. \$0.07	Dozen..D.P. \$0.66	

Fit Ford Switch



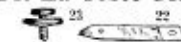
101 Key for Metal Coil Box, each	.....	\$0.15
Each..D.P. \$0.16	Dozen..D.P. \$1.66	

Fit Auto Coils



20 Platinum Screw, each	.....	\$0.50
Each..D.P. \$1.00	Dozen..D.P. \$10.88	
21 Platinum Spring, each	.....	1.00
Each..D.P. \$1.10	Dozen..D.P. \$12.00	

Fit La Coste Coils



22 Platinum Spring, each	.....	\$0.50
Each..D.P. \$1.00	Dozen..D.P. \$10.88	
23 Platinum Screw, each	.....	1.00
Each..D.P. \$1.10	Dozen..D.P. \$12.00	

Alpha Tungsten Contact Points



No. 4A2—Diameter Disc	.....	.085
Thickness Disc	.....	.035
Thickness Head	.....	.050
Diameter Shank	.....	.051
Length Shank	.....	.053

Is regularly used on all of the lower-priced vibrating spark coils.

Each	.....	\$0.36
Each..D.P. \$0.44	Dozen..D.P. \$4.80	

No. 41A55—Diameter Disc	.....	.115
Thickness Disc	.....	.035
Thickness Head	.....	.055
Diameter Shank	.....	.063
Length Shank	.....	.187

Is designed for use on spark coil vibrator springs and small magneto work. This is a special contact equipped with an unusually heavy shank for universal use on vibrator armatures, coil springs, vibrator adjusting screws and small magneto parts.

Each	.....	\$0.50
Each..D.P. \$0.55	Dozen..D.P. \$6.31	

No. 71A110—Diameter Disc	.....	.125
Thickness Disc	.....	.025
Thickness Head	.....	.045
Diameter Shank	.....	.045
Length Shank	.....	.045

Is exactly the size used on all Ford vibrating coils.

Each	.....	\$0.55
Each..D.P. \$0.60	Dozen..D.P. \$6.66	

No. 101A151—Diameter Disc	.....	.150
Thickness Disc	.....	.030
Thickness Head	.....	.032
Diameter Shank	.....	.065
Length of Shank	.....	.064

This is a larger contact for use on magnetos and Master vibrators.

Each	.....	\$0.60
Each..D.P. \$0.66	Dozen..D.P. \$7.22	



AUTOMOBILE FUSES

We list below Union Automobile Fuses, both Glass and Fiber Tube, used in connection with the electric lighting system on both Gasoline and Electric cars.

Types 1A, 2A, 3A and 4A can be used for any voltage up to 50 Volts.

Types 5A and 6A can be furnished as high as 250 Volts.

(STANDARD PACKAGE 100)

When ordering, do not fail to specify Fuse Number, Ampere and Make of Car; this will insure our sending the correct Fuse.



Type 1A
Glass Tube $\frac{3}{16}$ " x $\frac{1}{4}$ "



Type 2A
Glass Tube $\frac{1}{16}$ " x $\frac{1}{4}$ "



Type 3A
Glass Tube $\frac{1}{4}$ " x $\frac{1}{4}$ "



Type 4A
Fiber Tube $\frac{1}{4}$ " x $\frac{1}{4}$ "



Type 5A
Glass or Fiber Tube $1\frac{1}{2}$ " x $\frac{3}{8}$ "



Type 6A
Fiber Tube 2" x $\frac{1}{2}$ "

GASOLINE CARS

MAKE OF CAR	Uses Fuse No.	Amp.	Volts	List Each
Allen	5A	15	6	\$0.18
Arbenz	4A	10	6	.18
Auburn	5A	15	12	.18
Cadillac 1912	4A	15	6	.18
Cadillac 1913	6A	25	250	.25
Catercar		15	Ed. Plug Fuse	
Chadwick	4A	5	10	.18
Chadwick	5A	15	10	.18
Chalmers 1914	6A	15	250	.25
Chalmers 1915	6A	20	250	.25
Chandler	5A	15	12	.18
Chandler	5A	5	12	.18
Chevrolet	6A	20	250	.25
Cole 1913-1914	4A	15	12	.18
Cunningham James	4A	15	12	.18
Detroit	5A	15	12	.18
Dispatch	4A	12	6	.18
Dodge 1915	4A	10	6	.18
Dorris	5A	15	6	.18
Empire	2A	6&15	12	.05
Fiat	5A	5	250	.18
Fiat	5A	15	250	.18
Franklin 1913	3A	15	7&14	.05
Hudson	4A	15	6	.18
Hupmobile 1914	5A	15	250	.18
Hupmobile 1915	4A	15	10	.18
Imperial	4A	6	10	.18
Jeffery 1913-1914	5A	15	12	.18
Jeffery 1915	4A	10	12	.18
Kissel	4A	15	12	.18
Knox	4A	10	10	.18
Lexington	6A	15	250	.25
Locomobile 1914	6A	30	250	.25
Locomobile 1915	5A	15	7	.18
Lyons Knight 1913-1914	4A	8	10	.18
Lozier	6A	10	250	.25
L. C. E.	4A	15	12	.18
Marion	5A	5&15	10	.18
Marmon	4A	20	12	.18
Maxwell	3A	20	6	.05
Mercer	5A	7	250	.18
Mitchell	3A	15	6	.05
Moline 1914	4A	12	12	.18
Moline 1915	5A	15	250	.18

GASOLINE CARS

MAKE OF CAR	Uses Fuse No.	Amp.	Volts	List Each
Norwalk-6	5A	15	12	\$0.18
National 1914	4A	15	12	.18
Oakland	4A	15	150	.18
Overland	1A	20	6	.05
Overland	6A	20	250	.25
Packard	3A	15	6	.05
Paige	1A	20	6	.05
Peerless 1914	3A	20	10	.05
Peerless 1915	1A	20	10	.05
Pierce-Arrow	5A	10, 20 & 30	12	.18
Pope-Hartford	4A	10	6	.18
Premier	3A	10	6	.05
Regal 1914-1915	5A	6	7	.18
Reo	4A	8&15	6	.18
Studebaker 1914	4A	15	6	.18
Studebaker 1915	2A	15	6	.05
Speedwell	4A	15	10	.18
Staver	4A	15	6	.18
Stutz	3A	15	6	.05
Velie	1A	20	6	.05
Winton	3A	10	6	.05
White	4A	10	6	.18
Willys-Knight	6A	10	250	.25
Zimmerman	3A	15	6	.05

ELECTRIC CARS

MAKE OF CAR	Uses Fuse No.	Amp.	Volts	List Each
Anderson	6A	15	250	\$0.25
Argo A-B-C	5A	4	40	.18
Borland	5A	5	80	.18
Broc	5A	5	80	.18
Baker	5A	10	110	.18
Bailey	6A	10	250	.25
Century	6A	10	250	.25
Chicago	5A	15	250	.18
Detroit 1914	6A	15	250	.25
Detroit 1915	5A	15	250	.18
Dayton	6A	12	250	.25
G. V. C.	6A	5	90	.25
Grinnell	6A	15	250	.25
Ohio	6A	15	250	.25
Standard	6A	15	250	.25
Waverley	4A	5	100	.18
Woods	5A	5	250	.18



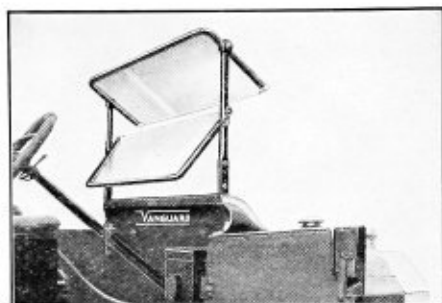
THE GIBSON COMPANY

INDIANAPOLIS



WINDSHIELDS

Vanguard Ball Bearing Windshields



Ford DeLuxe Windshield and steel cowl for any Ford model with fore doors. In ordering state what years model you wish to equip.

Each \$15.00
Each, D.P. \$23.33



Special Ford Shields

No. 10-C, 1911-12 Straight Type, coach glass, each \$12.50
Each, D.P. \$19.44
No. 10-P, 1911-12 Straight Type, plate glass, each 17.50
Each, D.P. \$27.22
No. 12-C, 1913-14 Zig-Zag Type, coach glass, each 12.50
Each, D.P. \$19.44
No. 12-P, 1913-14 Zig-Zag Type, plate glass, each 17.50
Each, D.P. \$27.22



Straight Shields

No. 71-C, 38 inches wide, 25½ inches high, coach glass, each \$12.50
Each, D.P. \$19.44
No. 71-P, 38 inches wide, 25½ inches high, plate glass, each 17.50
Each, D.P. \$27.22
No. 75-C, 42 inches wide, 29½ inches high, coach glass, each 12.50
Each, D.P. \$19.44
No. 75-P, 42 inches wide, 29½ inches high, plate glass, each 17.50
Each, D.P. \$27.22

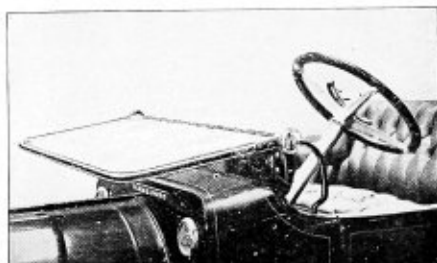
Vanguard Ball Bearing Windshields



No. A-14 Rain Vision Clear Vision Ventilating Windshield.

Plate glass only. Black frame, thumb nuts and hinge covers nickel-plated. Made in two sizes, 38 inches wide by 24 inches high, and 42 inches wide by 24 inches high.

Each \$25.00
Each, D.P. \$38.88



Torpedo Type Folding Shields

No. B30—40 inches wide, 17½ inches high.

Order by Number.
Hand rubbed black filler board with all shields of this type.
Price, plate glass only, each \$15.00
Each, D.P. \$23.33



Zig-Zag Shields

No. 76-C, 35½ inches wide, 25½ inches high, coach glass, each \$12.50
Each, D.P. \$19.44
No. 76-P, 35½ inches wide, 25½ inches high, plate glass, each 17.50
Each, D.P. \$27.22
No. 77-C, 38 inches wide, 25½ inches high, coach glass, each 12.50
Each, D.P. \$19.44
No. 77-P, 38 inches wide, 25½ inches high, plate glass, each 17.50
Each, D.P. \$27.22
No. 78-C, 42 inches wide, 29½ inches high, coach glass, each 12.50
Each, D.P. \$19.44
No. 78-P, 42 inches wide, 29½ inches high, plate glass, each 17.50
Each, D.P. \$27.22

Order by number and specify kind of glass wanted. Hand-rubbed black filler board with all shields unless rubber filler strip is specified. All sizes given are over all and exclusive of filler board strip. All the above shields have black frames.



WIND SHIELD VISOR

Road View Shield Visor



Road View Shield Visor is made to attach to the front bow of any automobile top, and is so simple that anyone can bolt it on in a very short time. Friction joints make positive automatic action and in putting top down just fold the visor up against inside of top and both top and visor will satisfactorily fold back together. A splendidly finished, black enameled, metallic frame, assembled to which are joined two patented friction joints. (You can set the visor at any desired position and it is guaranteed to stay automatically where it is set.) The glass used is plate glass and it sets in a metal packing, also nickel-plated glass retainers are used. Each visor is packed individually and is shipped complete with necessary bolts for attachment.

Road View Shield Visor, 8½ x 39 inches, each.....\$5.00
Each...D.P. \$8.33

Road View Shield Visor, 8½ x 41 inches, each.....5.50
Each...D.P. \$9.16

Security Wind Shield Cleaner

The Security Cleaner is an adaptation of the rubber squeegee used for cleaning show windows. It is automatically attached on the upper frame of the shield. A rubber strip presses firmly against the outside surface of the glass and a guiding arm inside prevents rattling.

When your vision is blurred, the Security obviates the necessity of lowering the shield and exposing yourself to the storm, or leaving your seat, or removing both hands from the wheel for the purpose of wiping the glass. Draw the cleaner once across the glass and every particle of dust, every drop of rain or every flake of snow will be instantaneously removed. It is so compact that it will not interfere with the folding or operation of the shield and it is so inconspicuous that it may be kept on the shield as a permanent fixture.

Security Wind Shield Cleaner, nickel-plated finish, each.\$1.50
Each...D.P. \$2.20



STEERING WHEELS

Gemco Steering Wheels

Spiders made of malleable iron, smoothly polished and finished with our celebrated High Lustre Enamel. Rims black also.

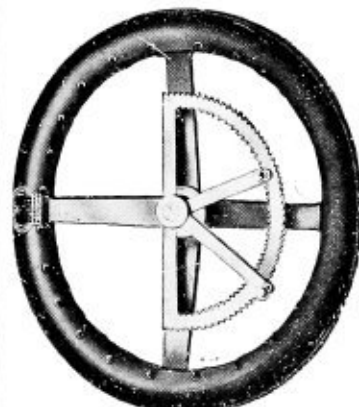
Steering Wheels.
14-inch, each \$2.50
Each...D.P. \$3.71

Steering Wheels.
15-inch, each 2.85
Each...D.P. \$4.28

Steering Wheels.
16-inch, each 3.25
Each...D.P. \$4.82

Steering Wheels.
17-inch, each 3.60
Each...D.P. \$5.34

Steering Wheels.
18-inch, each 4.00
Each...D.P. \$5.93



Rubber Steering Wheel Covers

These covers lace over the steering wheel. They give a positive gripping surface and relieve the hands from all vibration. They are made from high grade red rubber.

Rubber Steering Wheel Covers for 17-inch or less, each...\$2.50
Each...D.P. \$3.88

Rubber Steering Wheel Covers for 18-inch or larger, each...3.00
Each...D.P. \$4.44

Steer Warms

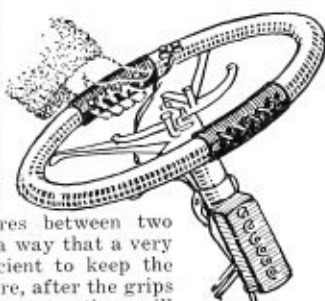
This illustration shows a pair of Steer Warms installed on an Overland Car.

Ieco Steer Warms consist of two neat leather covered grips, one for each hand, which lace on the steering wheel at convenient places for driving. The inventor of Steer Warms has very cleverly placed special resistance wires between two copper plates in such a way that a very small current is sufficient to keep the grip warm. Furthermore, after the grips reach a certain temperature, they will get no hotter, but will retain this same heat as long as the current is turned on.

Steer Warms can be attached to any make of car in ten minutes. There are no bolts or screws; no holes to bore. Lace on; wire up—that's all.

Ieco Steer Warms for Ford, pair.....\$5.00
Per Pair...D.P. \$7.77

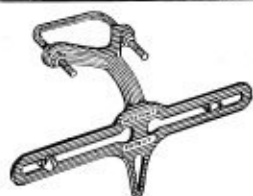
Ieco Steer Warms for other cars, pair.....7.50
Per Pair...D.P. \$11.66





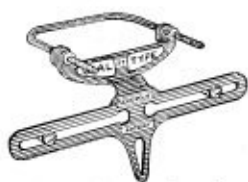
LICENSE BRACKETS

Neverout License Brackets for front and rear license tags. Hold license tags firmly in position and illuminate rear numbers as required by law. Made for every style of car. Furnished in black enamel.



Front License Bracket

No. 36—For cars with round fillers, attaches directly to water filler tube, each\$0.50
Each...D.P. \$0.66 Dozen...D.P. \$6.66



Front License Bracket

No. 77—For all cars with oval fillers, attaches directly to water filler tube, each\$0.50
Each...D.P. \$0.66 Dozen...D.P. \$6.66



Rod License Bracket

No. 178—For attaching to any rod between headlights. Because of single grip can be used on curved or straight rods, each\$0.50
Each...D.P. \$0.66 Dozen...D.P. \$6.66



Combination Rear Lamp and License Tag Holder

No. 62—Interchangeable type, fits majority of brackets on rear of cars, each\$0.50
Each...D.P. \$0.66 Dozen...D.P. \$6.66



Ford Front License Bracket

No. 871—Attaches to Ford headlight bracket when tag is not over 15 inches long, each\$0.50
Each...D.P. \$0.66 Dozen...D.P. \$6.66



Combination Ford Rear Lamp and License Tag Holder

No. 621—Interchangeable type for Ford cars. Flat prop. made for lamps that do not have combination sockets and require flat prop. Each\$0.50
Each...D.P. \$0.66 Dozen...D.P. \$6.66



PATENT LICENSE BRACKET NO. 76
PATENT INTERCHANGEABLE SYSTEM

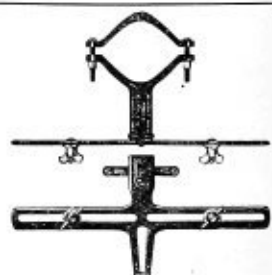
No. 76—For all cars with oval fillers, attaches directly to water filler tube, each\$0.75
Each...D.P. \$0.88 Doz. ...D.P. 9.33



No. 87—Attaches to Ford headlight bracket when tag is not over 15 inches long, each\$0.75
Each...D.P. \$0.88 Doz. ...D.P. 9.33



No. 9 Regular—Fits water filler on majority of cars. Attaches directly to water filler tube, each\$0.75



No. 8—Large size for all cars with extra large fillers. Attaches directly to water filler tube, each\$0.75
Each...D.P. \$0.88 Doz. ...D.P. 9.33



No. 78—For attaching to any rod between headlights. Because of single grip can be used on curved or straight rods, each\$0.75
Each...D.P. \$0.88 Doz. ...D.P. 9.33



No. 22 Regular—Fits majority of brackets on rear of cars, each\$0.75
Each...D.P. \$0.88 Doz. ...D.P. 9.33



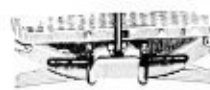
No. 12—Special prop. adapted for cars having large fenders, where lamp will not fit when placed on regular bracket, each\$0.75
Each...D.P. \$0.88 Doz. ...D.P. 9.33



No. 0-21—Flat prop. made for lamps that do not have combination sockets and require flat prop. each\$0.75
Each...D.P. \$0.88 Doz. ...D.P. 9.33

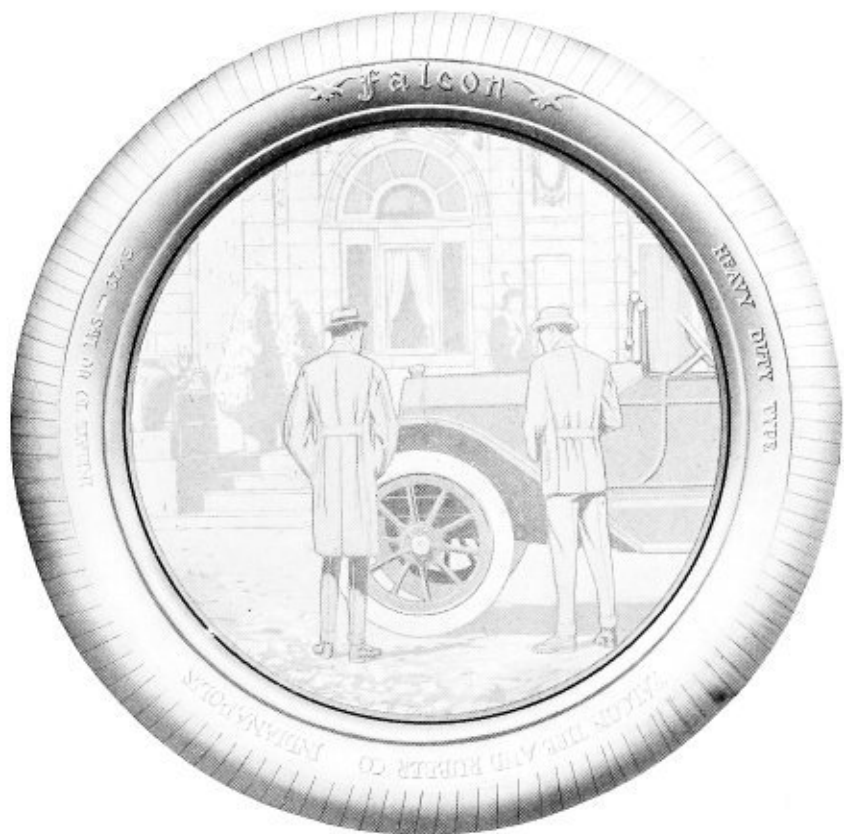


No. 95—License Brackets to hold plate suspended from rod between headlights. This type admits of many positions, per pair\$0.75
Per Dozen Pair, D.P. \$2.00



No. 97—Ford License Brackets, to be held by front spring bolts, as shown in illustration, per pair\$0.75
Per Dozen Pair, D.P. \$3.55

"FALCON" Single Cure Wrapped Tread Process of Tire Manufacture



OF ALL THE PROBLEMS confronting the motorist, the bulk of them have been solved with the exception of tire upkeep and expense, which without question constitute seventy-five per cent. of all "motor ailments." This, in a measure, is easily explained. The automobile industry, which has sprung up with lightning-like rapidity in little more than a decade, gave early manufacturers of tires little or no opportunity for necessary experimentation or investigation of the best methods of manufacture or the varying demands that would be placed upon tires in automobile service.

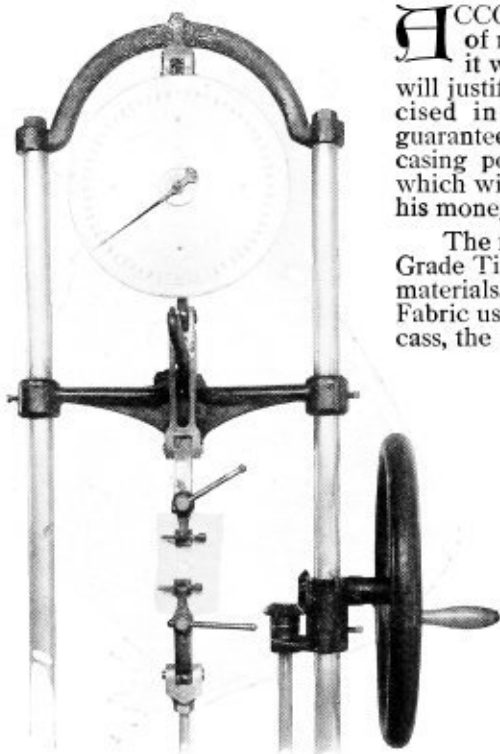
The automobile itself, an offshoot of the bicycle industry, naturally attracted the attention of bicycle tire manufacturers, and the methods in use at that time were continued in the building of automobile tires. This method was the "full-moulded" process, which method is still used by a few manufacturers, not because they believe this method possesses advantages over any other, but because it would involve the scrapping of an enormous amount of equipment which they have installed during that period of the automobile industry when "quantity of output rather than quality of product" was the watchword.

But a new era for the motorist has arrived, for new manufacturers with improved methods based on careful experiments and extensive tests have entered the field.

This new method is the "Single Cure Wrapped Tread Process" of "Vulcanization in Live Steam instead of Dry Heat."

This is the method used in the manufacture of Falcon Casings, which, coupled with "Falcon" standards, gives the motorist the much-desired and long-sought perfect automobile tire. An evidence of the superiority of the Single Cure Wrapped Tread Process is reflected by the fact that practically every manufacturer of the modern school is using it, and that many of the older ones are gradually coming to it. We review briefly this process on the following pages.

The "FALCON" Process of Tire Manufacture



Falcon Testing Machine

ACCOMPANY us through the process of manufacturing "Falcon" Casings; it will prove interesting to you, and will justify our claims, that the care exercised in the production of these tires guarantees every user the highest grade casing possible to manufacture, and one which will give him the greatest value for his money.

The first essential to a successful High-Grade Tire is the proper selection of raw materials. These materials consist of the Fabric used in the construction of the carcass, the breaker strip, which is one of the most important elements in the entire structure, and the rubber. With these three materials of the highest grade, the first step is accomplished.

In the manufacture of "Falcon" Casings we use nothing but the very best Long Staple Sea-Island Cotton in our fabric—there are many substitutes known as Egyptian Fabric, Island Fabric, etc.—but they are not Sea Island basis.

In the production of the Breaker Strip, the same high-grade material is employed, and is selected for its toughness and uniformity.

Your attention is directed to the Tensile Testing Machine, shown on this page. Every bolt of Fabric purchased by us is tested for tensile strength. You will note the piece in the machine shows a strength of 390 pounds to the square inch. This is a fair average of what is expected from this material.

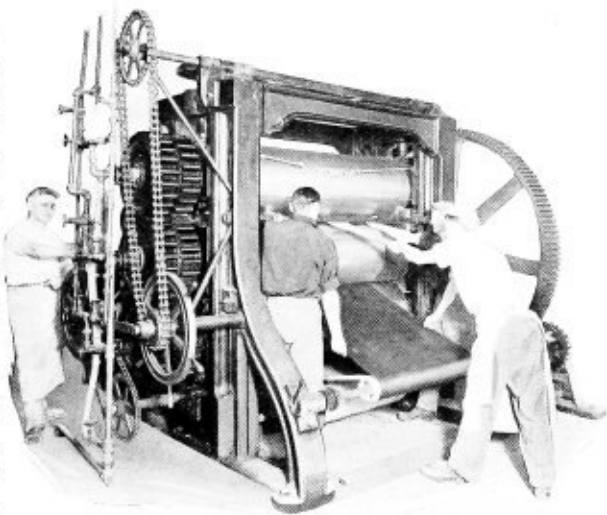
The material for the Breaker strip is subjected to the same drastic test, and none is accepted unless it meets the exacting approval of our test inspectors. A large percentage of tire troubles can be attributed to weak and unsatisfactory fabric, which will permit blow-outs, when the least excess pressure is exerted on the tire. We discard or reject many bolts of fabric that would ordinarily be accepted as standard by the majority of Tire Manufacturers.

After having tested and accepted the Fabric, the next and most important step is the selection of the Rubber. There are many kinds, some of which, while fair for work of this nature, does not have the flexibility, resiliency and toughness demanded by the "Falcon" standard; we therefore use nothing but the highest-grade "Up-River Para" rubber, knowing it to be vastly superior to any of the other kinds.

We have now selected our materials, let us pass to the manufacturing of the "Falcon" Single-cure Wrapped Tread Tires.

The "FALCON" Process of Tire Manufacture

THE next step after having selected the most excellent materials from all the markets of the world, is the calendering of the fabric. This is the process of forcing the pure rubber through the very close mesh of the fabric. This is a most important and exacting operation. Unless great care is exercised, there is constant liability of an uneven permeation of the fabric. When this occurs, the uniformity of the carcass is destroyed and there is a possibility of one layer separating from the other and a short-lived, unsatisfactory tire is the result.



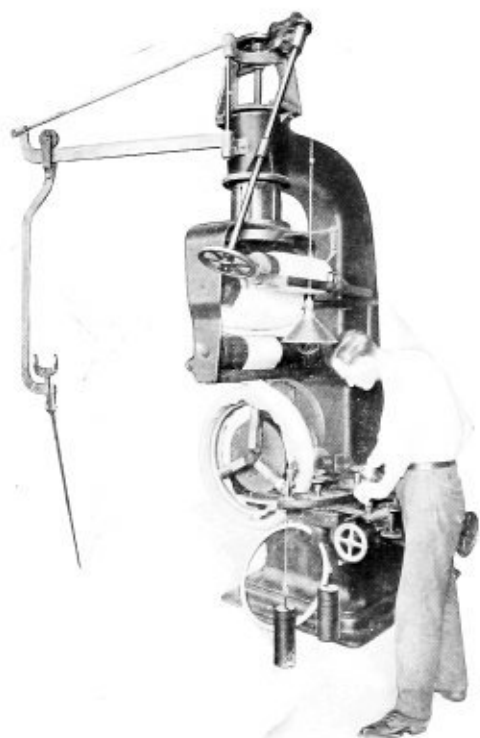
Falcon Calendar

We show on this page one of the Friction Calenders, one of a battery of ponderous machines on which the calendering process is performed under the "Falcon" process. As in the selection of the raw materials, the same great care is exercised in the calendering and in every process or operation in the construction of the "Falcon" Single-cure Wrapped Tread Casings. We have installed what is considered the latest improved and largest calender in operation to-day. This machine is so constructed that the regulation of the distribution of the rubber is controlled to the thickness of a hair; this machine is driven by a 300 H.P. motor. The huge rolls of these calenders have the smoothness of glass; they are heated internally by steam, the temperature being regulated to a degree that positively insures uniform application of the rubber to the fabric, which is the very life of the tire itself.

"Falcon" standards in manufacture are employed in this process. To guarantee the ultimate "beyond criticism" Tire, this same exacting standard is maintained in every department. That Standard is reflected in the long and satisfactory service the "Falcon" Tire renders its users.

We now have the materials worked into a form that permits the next step in the production of the Tire, which is that of building the Tire from the foundation of calendered fabric.

The "FALCON" Process of Tire Manufacture



Falcon Tire Building Machine

THE NEXT operation in building the "Falcon" Tire is the construction of the fabric carcass. The carcass is built by stretching the required number of plies of calendered fabric, one over another, around a metal core, of the same shape as the Tire that is to be made.

The old method of tire building was by hand, which method was unsatisfactory and uncertain. One of the most important essentials in the manufacture of a perfect tire is perfect adhesion and a uniform stretch of the fabric plies, of which its carcass is built. If one small spot does not adhere or if uniform stretching is not effected, a weak spot is developed in the carcass that will eventually result in a blow-out after the tire is placed in use. It

is manifest, therefore, that when built by hand, there is great possibility of a lack of uniformity, owing to the changeable strength of the tire-builder, which will naturally vary over the working day.

"Falcon" Casings are built on the most highly developed machine ever devised for this purpose. It represents many years of study in the process of tire making, and is absolutely infallible in its operation. One of the "Falcon" Tire Building Machines is shown on this page. Please observe that the lower roll contains frictioned or rubberized (calendered) fabric, which is fed directly over the core. The upper roll merely strips off the light covering of muslin, which is used to protect the rubberized (calendered) surfaces of the fabric, from contamination and handling from the time it is calendered until it is ready for use in building a carcass.

Please note that the tension on the fabric is absolutely uniform, and that there is no possibility of "spots" not adhering. After the required number of layers have been applied, we have our carcass complete and we are now ready for the next operation in the "Falcon" standard of Tire Manufacture.

The "FALCON" Process of Tire Manufacture

falcon

THE OLDER processes of Tire manufacture contemplated the use of moulds. This has been proven a very unsatisfactory and questionable method, as, after the Tire had been placed in the mould, the uneven expansion and contraction of the Tire and the mould would invariably cause some part of the carcass to "pinch," which would rupture the fabric and thus weaken the entire structure. After the Tire is placed in use, the point where this pinch occurred is its weakest point, and the result is almost invariably a blow-out.

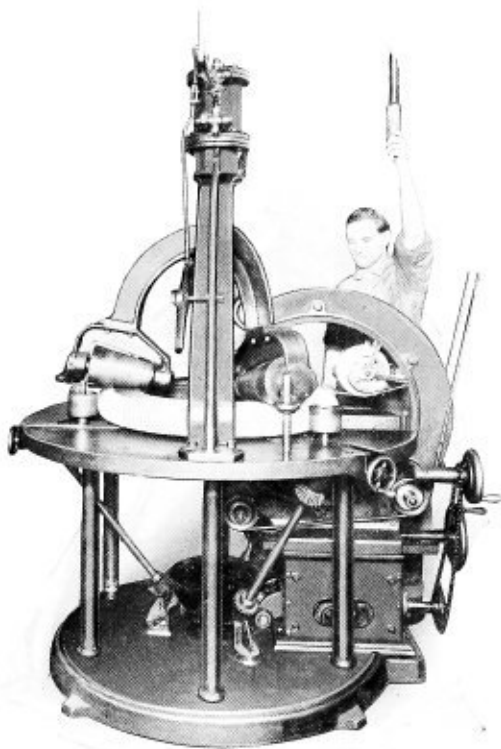
With the "Falcon" Single Cure Wrapped Tread process, the following method is employed: after the Tire is completely built upon the core, a light ring is placed upon either side of the completed Tire. These rings exactly conform to the bead of the tire and extend up to about one-fourth of an inch below the tread. As these rings are drawn together, the fabric is drawn tight, away from the apex of the tire toward the bead. It is therefore impossible for a pinch or buckle to occur. This eliminates one of the most troublesome features heretofore found in tire manufacture and that is the pinching of the fabric.

The fit of these rings is so exact that they must conform to micrometer measurements—a part of the "Falcon" standard.

After these rings are in place, the carcass is wrapped with heavy cotton tape by the machine shown on this page. This tape is uniformly distributed over the whole surface and under strong tension. This compression gives the tread the utmost cohesion and insures an absolutely even flow of rubber during vulcanization.

You will observe that the mechanical accuracy of the wrapping machine positively insures even application of the wrapping material, and that there is absolutely no possible opportunity for a variation of the pressure exerted on the carcass by the tape.

The Tire is now ready for the most important and vital operation in its production. The vulcanizing process as used under the "Falcon" standard preserves the vitality of the raw materials and guarantees every "Falcon" user the utmost in Tire value.



Falcon Tire Wrapping Machine

falcon

The "FALCON" Process of Tire Manufacture



Falcon Vulcanizing Machine

IN the old or moulded tread process of tire manufacture, dry heat of excessive temperature was used. Being encased in a heavy mould and hermetically sealed, no part of the tire ever came in contact with the live steam. Every manufacturer of rubber products is aware that the only satisfactory and permanent method of vulcanization is by the application of live steam to the rubber itself.

The "Falcon" process retains the natural vegetable wax and oil in the cotton fibre during the process of vulcanization. This natural lubricant in the cotton means less internal friction and more life, consequently more mileage.

Wax and oil carbonize at 240 degrees. The old

method (moulded process) requires about 287 degrees to vulcanize a tire. The "Falcon" process is to vulcanize at a low degree of heat, without robbing the fabric of its life-giving wax and oil, thus saving the fibre from becoming brittle and losing the tensile strength which we are so careful to maintain in the selection of the raw product. The "Falcon" Tire is not devitalized during manufacture—every life-giving element is preserved for the wear to which it is subjected by the Motorist.

After "Falcon" Tires are wrapped securely in tape, as described on the preceding page, grids are placed between them and about twenty tires are placed in the vulcanizer for one vulcanization. These grids separate the tires completely but do not obstruct the free circulation of the live steam to every part of the tire itself. As the temperature of steam is constantly at a fixed degree of heat, great care is exercised to maintain the pressure at a given point. A fluctuation of one degree, while not of great moment, is a violation of the "Falcon" standard and will not be tolerated. The length of time these tires remain in the vulcanizer is determined by tests made on many hundreds of casings. Test sections are made at the same time these tires are vulcanized, and after the tires are finished these pieces are subjected to every known analysis and test. This consists of pulling the fabric layers away from each other and the friction measured to a certain number of pounds per square inch. This positively insures the purchaser of "Falcon" casings constant uniformity.

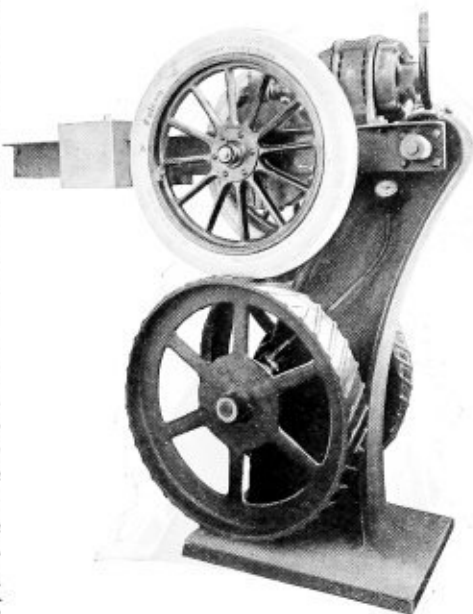
The "Falcon" tire built to "Falcon" standards is now ready for you.

We show you on the next page how we determine the longevity of the "Falcon" casings, and it is so rigorous that we know your service will be mild in comparison.

The "FALCON" Process of Tire Manufacture

Falcon

EVERY manufacturer of a commodity should take pride in his product. If his efforts have been consistent and conscientious, he has the satisfaction of knowing that he has given the world the best it is possible to construct. So it is with the "Falcon" Tire. The high standard necessary throughout its manufacture guarantees the user the very highest value obtainable in Tires. Excellence in Raw Materials, the most skilled workmen in the industry, together with the most improved modern machinery obtainable, leaves nothing to be desired in the delivering of a superior Tire to the ultimate user—the Motorist. There must, however, be some means at hand whereby the manufacturer can determine the full merit of his product, operating under the same conditions as it would encounter in actual service.



Falcon Tire Testing Machine

To satisfy ourselves that "Falcon" Tires are beyond criticism, and that they will give extended service to every purchaser, the factory has installed the machine illustrated on this page. This is the latest improved tire-testing machine. A tire is selected at random from every heat, and tested to destruction on this machine. The method of testing is as follows: the tire is first placed on the wheel in exactly the same manner as it is applied to the automobile wheel in daily practice; the wheel is then placed on the testing machine. You will please note the weight at the end of the arm—this weight is adjusted to the comparative weight of the car using this same size tire. This insures the same pressure as would be found in regular road driving, with a loaded car. The tire is in contact (with this weight bearing thereon) with a wheel having irregular corrugations, which correspond with the usual road obstructions and ruts. The wheels to which the tires are attached are driven by a motor, and the wheels having the corrugations are in turn driven by the tires. This gives exactly the same result as driving a car over a hard, rough and stony road. Please note also the speedometer on the side of the machine. It tells the mileage obtained in these tests. There is no harder test possible for a tire. We have tried them all, but "Falcon" standards demand the most severe tests ever invented. The result is, that unless the production of every heat will meet a certain mileage, that heat is discarded.

If any method, any device, any process can be found that will improve "Falcon" Casings, you may be assured it will become a part of the "Falcon" standard of producing Tires that are supreme in the tire field.

Falcon

"FALCON" Single Cure Wrapped Tread Casings



PLAIN TREAD

THE illustration herewith gives only a faint idea of the appearance of the "Falcon" Plain Tread Casing. It is without question the finest tire ever offered in appearance, materials and design. They are all built oversize; in other words, a four-inch tire is of larger diameter than four inches. Every "Falcon" Casing is warranted to give complete satisfaction. Any proving defective will be adjusted on a mileage basis of 3,500 miles, but with ordinary care and attention much greater mileage can be obtained. We have instances on record where "Falcon" Casings have given double this mileage.

The "Falcon" Tire is a profitable proposition for the dealer. He is safe in recommending them to his trade. They are built for long, hard service and nothing but the highest grade materials enter into their construction.

We have a mighty interesting distributing proposition for the wide-awake dealer—one that will guarantee him a nice profit from his Tire sales. Write us at once.

Price List Plain Tread

Made in Clincher, Quick Detachable Clincher and Straight Side.
Be sure to specify type when ordering.

Size	List Price
28 x 3	\$10 00
30 x 3	10 65
32 x 3	12 15
30 x 3½	13 90
31 x 3½	14 95
32 x 3½	16 00
34 x 3½	18 60
30 x 4	20 60

Size	List Price
31 x 4	\$21 70
32 x 4	22 20
33 x 4	23 25
34 x 4	23 70
35 x 4	24 90
36 x 4	25 30
37 x 4	26 40

Size	List Price
34 x 4½	\$31 60
35 x 4½	33 00
36 x 4½	33 50
37 x 4½	34 90
35 x 5	36 85
36 x 5	37 40
37 x 5	39 10
38 x 5½	55 05

"FALCON" Single Cure Wrapped Tread Casings

NON-SKID TREAD

NON-SKID TIRES are gaining in popularity. Heretofore the various types of non-skid tires offered have not been designed to meet the varying conditions encountered in every-day service, with the result that some users have not had the success that is possible with a well-designed non-skid tread.

The "Falcon" Non-skid Tread is of special design, based on actual experience and many tests. You will please note in the photograph that the Non-skid is not merely an indentation in the tread, but is a special thickness added to the regular plain tread tire, giving that much more additional wearing surface and in no way robbing the tire of thickness or strength. This piece is vulcanized on the tire at the same time the whole tire is vulcanized. The crescents are of special curvature, which, together with the angles at the points, insure constant contact with the road surface, causing them to "grip instead of slip," and this non-skid feature remains until the tires are worn out, whereas, with the raised type of non-skid tire the non-skid feature is retained but a short time.

These casings are warranted to give complete satisfaction and should any prove defective return them to us and they will be adjusted on a basis of 3,500 miles, but with ordinary care and attention much greater mileage can be obtained. We have instances on record where "Falcon" Casings have given double this mileage.

Dealers should recommend this Non-skid "Falcon" Casing. It gives the motorist additional mileage for his money and at the same time insures him against accidents from skidding and slipping.

We have a mighty interesting distributing proposition for the wide-awake dealer—one that will guarantee him a nice profit from his tire sales. Write us at once.

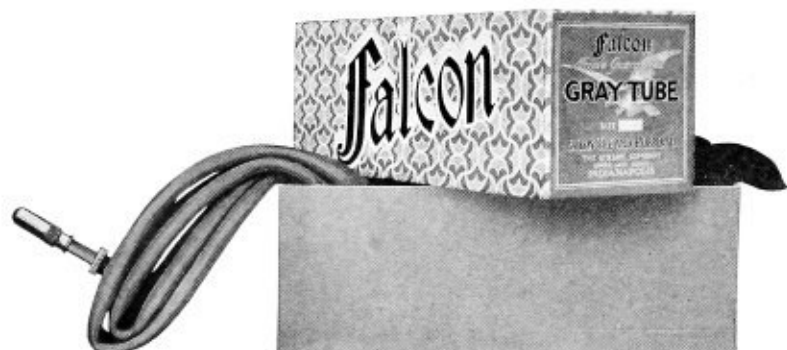


Price List Non-Skid

Made in Clincher, Quick Detachable Clincher and Straight Side.
Be sure to specify type when ordering.

Size	List Price	Size	List Price	Size	List Price
28 x 3	\$11 50	31 x 4	\$24 95	34 x 4 1/2	\$36 35
30 x 3	12 25	32 x 4	25 55	35 x 4 1/2	37 95
32 x 3	14 00	33 x 4	26 75	36 x 4 1/2	38 55
30 x 3 1/2	16 00	34 x 4	27 30	37 x 4 1/2	40 10
31 x 3 1/2	17 20	35 x 4	28 60	35 x 5	42 40
32 x 3 1/2	18 40	36 x 4	29 10	36 x 5	43 00
34 x 3 1/2	21 45	37 x 4	30 35	37 x 5	44 95
30 x 4	23 65			37 x 5 1/2	63 30

"FALCON" Gray Inner Tubes



"Falcon" Inner Tubes have made their reputation by the service they have rendered. These tubes are made of the very highest grade "Up-River-Para" Rubber, with just enough compound to insure preservation of the rubber, and to give the tube toughness and vitality. There are numerous brands of tubes offered the Motorist, and on account of the unusually large and growing demand, manufacturers have been prone to cheapen their product. This does not apply to the "Falcon" Tubes. The greatest possible care in the selection of the Raw Materials, the use of the most modern machinery, the highest class skilled labor obtainable, combined with "Falcon" standards, makes this tube the very finest product in this line. It is impossible to produce a better tube than the "Falcon."

"Falcon" Tubes are of extra heavy thickness—the walls are heavier than any other tube of equal size on the market. This reduces the liability to blow-outs and punctures.

"Falcon" Tubes are packed—first in waxed paper, then in a rubberized water-proof bag, the whole being contained in a handsome lithographed box. Our method of packing insures preservation of the tube. It is dust-proof, water-proof and oil-proof, and when placed in the tool box there is little chance of its being affected by abrasion or rough handling.

"Falcon" Tubes bear a triple guarantee: that of the Manufacturer—The Gibson Company—and the Dealer. The motorist takes no chance on this warranted product, and is positively assured service and satisfaction.

"Falcon" Gray Inner Tubes are more than ninety per cent. pure rubber; they are what is known as "floating stock" and will float in water. Try this on other tubes offered you. One of the best recommendations of a Gray Tube is that it is "floating stock."

The Valve Base in all "Falcon" Tubes is concealed, giving a much neater job, and making this portion of the tube more substantial and less liable to wear.

Price List "Falcon" Gray Tubes

Size	List Price	Size	List Price	Size	List Price
28 x 3	\$2 40	31 x 4	\$4 15	34 x 4½	\$5 70
30 x 3	2 55	32 x 4	4 30	35 x 4½	5 75
30 x 3½	3 05	33 x 4	4 35	36 x 4½	5 90
31 x 3½	3 15	34 x 4	4 50	37 x 4½	6 20
32 x 3½	3 20	35 x 4	4 70	35 x 5	6 95
34 x 3½	3 40	36 x 4	4 85	36 x 5	7 10
36 x 3½	3 65	37 x 4	4 95	37 x 5	7 20
30 x 4	4 00			37 x 5½	7 85

Motorcycle Sizes

28 x 2¼	\$1 90	28 x 2¾	\$2 25	28 x 3	\$2 65
28 x 2½	2 15	29 x 2¾	2 35	29 x 3	2 70

A dealer looking for the best selling proposition in the Tire line should write or wire to-day for a "Falcon" agency.

"FALCON" Red Inner Tubes



The "Falcon" Red Inner Tube is the "Superlative" in inner tubes. It has been made for the discriminating motorist and is without equal in this line. Some people demand the exceptional in quality and we have made this tube for that class.

The "Falcon" Red Inner Tube contains the same high-grade "Up-River-Para" Rubber as used in the "Falcon" Gray Tube but is compounded in a different manner. The process of manufacture takes somewhat longer time and the methods employed in handling are slightly different. The finished product is tested in every conceivable manner and when delivered to the motorist is as near perfect as human ingenuity can make it. "Falcon" Standards, as applied to Casings and Gray Inner Tubes, dominate the "Falcon" Red Tube.

"Falcon" Red Tubes are extra heavy in thickness. Their color is a fine golden brown. The compound used in their manufacture gives a peculiar flexibility to the tube and at the same time preserves the texture of the material. "Falcon" Red Inner Tubes never deteriorate.

"Falcon" Red Inner Tubes are packed in the same manner as the Gray: first in waxed paper, then in rubberized water-proof bags, and the whole in high-grade lithographed boxes. This package is dust-proof, water-proof and proof against abrasion and rough handling when placed in the tool box. "Falcon" Tubes bear a triple guarantee: that of the manufacturer, the Gibson Co. and the dealer. The motorist takes no chance on this warranted product and service and satisfaction is positively assured him. The valve base in all "Falcon" Tubes is concealed, giving a much neater job and making this portion of the tube more substantial and less liable to wear.

Price List "Falcon" Red Tubes

Size	List Price	Size	List Price	Size	List Price
28 x 3	\$2 75	31 x 4	\$4 80	34 x 4½	\$6 60
30 x 3	2 90	32 x 4	4 90	35 x 4½	6 65
30 x 3½	3 50	33 x 4	5 00	36 x 4½	6 80
31 x 3½	3 60	34 x 4	5 15	37 x 4½	7 10
32 x 3½	3 65	35 x 4	5 40	35 x 5	8 00
34 x 3½	3 90	36 x 4	5 55	36 x 5	8 15
36 x 3½	4 20	37 x 4	5 70	37 x 5	8 30
30 x 4	4 60			37 x 5½	9 00

Motorcycle Sizes

Size	List Price	Size	List Price	Size	List Price
28 x 2½	\$2 30	28 x 2½	\$2 75	28 x 3	\$3 10
28 x 2½	2 60	29 x 2½	2 80	29 x 3	3 25

We have a special dealer's proposition on "Falcon" Tires, which means dividends to the wide-awake dealer. Write or wire for it at once.



SQUEEGEE OR SAFETY TREAD DIAMOND TIRES

Manufactured by THE B. F. GOODRICH COMPANY
AKRON, OHIO

We are distributors for Diamond Squegee and smooth tread casings and can fill your orders promptly.

We highly recommend these tires to our customers and can assure you of good service and fair adjustments if there be need of any, as they are made by the largest and one of the most reliable concerns in the tire industry.

DIAMOND SQUEEGEE TREAD

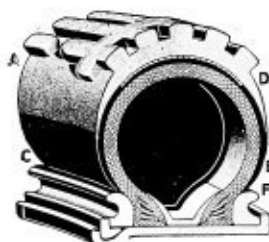
The Diamond Squegee tread has proven to be a most effective non-skid tire, but its popularity should not be attributed altogether to the fact that it prevents skidding, but rather that it is an "all around" good tire for the motorist.

SLIGHT EXTRA COST

The cost is very little more than for the plain tread casing, running from about six to ten per cent according to size.

ADJUSTMENTS

Diamond Tires will be adjusted at any Diamond or Goodrich branch regardless of location.



Size	Regular Q. D. or Straight Bead, Smooth Tread	Regular Q. D. or Straight Bead, Safety Tread	Gray Tubes	Red Tubes	Size	Regular Q. D. or Straight Bead, Smooth Tread	Regular Q. D. or Straight Bead, Safety Tread	Gray Tubes	Red Tubes
28x3.....	\$8.50	\$8.95	\$2.25	\$2.50	36x4.....	\$20.50	\$21.55	\$4.20	\$4.65
Each..D.P.	\$16.10	D.P. \$16.87	D.P. \$3.88	D.P. \$4.22	Each..D.P.	39.96	D.P. 41.96	D.P. 7.66	D.P. 8.44
30x3.....	9.00	9.45	2.35	2.60	37x4.....	21.30	22.35	4.30	4.80
Each..D.P.	17.20	D.P. 18.10	D.P. 4.11	D.P. 4.55	Each..D.P.	41.74	D.P. 43.85	D.P. 7.88	D.P. 8.77
32x3.....	9.90	10.10	2.50	2.80	32x4 1/2.....	25.70	27.00	4.85	5.40
Each..D.P.	19.20	D.P. 20.20	D.P. 4.44	D.P. 4.88	Each..D.P.	49.29	D.P. 51.73	D.P. 8.55	D.P. 9.44
34x3.....	10.45	10.95	2.60	2.90	33x4 1/2.....	26.40	27.70	4.95	5.50
Each..D.P.	20.43	D.P. 21.42	D.P. 4.66	D.P. 5.11	Each..D.P.	50.84	D.P. 53.40	D.P. 8.77	D.P. 9.66
29x3 1/2.....	11.80	12.10	2.65	2.95	34x4 1/2.....	26.00	27.30	5.00	5.55
Each..D.P.	22.87	D.P. 23.98	D.P. 4.77	D.P. 5.33	Each..D.P.	49.95	D.P. 52.40	D.P. 8.88	D.P. 9.88
30x3 1/2.....	11.60	12.20	2.70	3.00	35x4 1/2.....	27.00	28.35	5.10	5.65
Each..D.P.	22.42	D.P. 23.53	D.P. 4.88	D.P. 5.44	Each..D.P.	52.17	D.P. 54.84	D.P. 9.10	D.P. 10.10
31x3 1/2.....	12.15	12.75	2.75	3.05	36x4 1/2.....	27.35	28.70	5.20	5.80
Each..D.P.	23.64	D.P. 24.87	D.P. 5.00	D.P. 5.55	Each..D.P.	52.95	D.P. 55.61	D.P. 9.33	D.P. 10.43
32x3 1/2.....	13.35	14.00	2.80	3.10	37x4 1/2.....	28.35	29.75	5.30	5.90
Each..D.P.	25.75	D.P. 27.08	D.P. 5.11	D.P. 5.66	Each..D.P.	55.17	D.P. 57.95	D.P. 9.55	D.P. 10.66
33x3 1/2.....	15.20	15.95	2.90	3.20	38x4 1/2.....	30.05	31.55	5.40	6.00
Each..D.P.	29.86	D.P. 31.30	D.P. 5.33	D.P. 5.88	Each..D.P.	58.94	D.P. 61.94	D.P. 9.77	D.P. 10.88
34x3 1/2.....	11.90	15.65	2.95	3.30	35x5.....	30.75	32.30	6.10	6.75
Each..D.P.	29.20	D.P. 30.64	D.P. 5.44	D.P. 6.00	Each..D.P.	58.28	D.P. 61.16	D.P. 10.77	D.P. 11.90
36x3 1/2.....	15.65	16.45	3.10	3.45	36x5.....	31.15	32.70	6.20	6.90
Each..D.P.	30.86	D.P. 32.50	D.P. 5.77	D.P. 6.33	Each..D.P.	59.16	D.P. 62.05	D.P. 10.99	D.P. 12.21
30x4.....	17.15	18.00	3.60	4.00	37x5.....	32.30	33.90	6.30	7.00
Each..D.P.	32.52	D.P. 34.19	D.P. 6.33	D.P. 7.00	Each..D.P.	61.72	D.P. 64.83	D.P. 11.21	D.P. 12.43
31x4.....	17.95	18.85	3.70	4.10	39x5.....	34.20	35.90	6.40	7.10
Each..D.P.	34.30	D.P. 36.08	D.P. 6.55	D.P. 7.22	Each..D.P.	65.94	D.P. 69.27	D.P. 11.44	D.P. 12.66
32x4.....	18.25	19.15	3.80	4.20	36x5 1/2.....	43.70	45.90	6.60	7.35
Each..D.P.	34.97	D.P. 36.74	D.P. 6.77	D.P. 7.55	Each..D.P.	84.80	D.P. 89.02	D.P. 11.33	D.P. 12.55
33x4.....	19.05	20.00	3.90	4.35	37x5 1/2.....	44.75	47.00	6.75	7.50
Each..D.P.	36.74	D.P. 38.63	D.P. 7.00	D.P. 7.77	Each..D.P.	87.14	D.P. 91.47	D.P. 11.66	D.P. 12.88
34x4.....	19.10	20.35	4.00	4.45	38x5 1/2.....	43.80	46.00	6.85	7.60
Each..D.P.	37.52	D.P. 39.30	D.P. 7.22	D.P. 8.00	Each..D.P.	85.03	D.P. 89.25	D.P. 11.88	D.P. 13.21
35x4.....	20.20	21.20	4.10	4.55					
Each..D.P.	39.30	D.P. 41.30	D.P. 7.44	D.P. 8.22					



BLOW-OUT PATCHES

Gibson Quality Patches



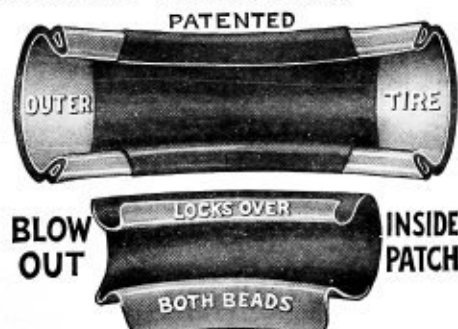
Made just the right size and weight for use over breaks in old tires in connection with Reliners—other patches being too heavy for this purpose.

No. 2100. Gibson Quality Inside Patch, 3-inch, each	\$0.25
Each..D.P. \$0.38. Dozen..D.P. \$4.34	
No. 2101. Gibson Quality Inside Patch, 3½-inch, each	.30
Each..D.P. \$0.44. Dozen..D.P. \$4.80	
No. 2102. Gibson Quality Inside Patch, 4-inch, each	.35
Each..D.P. \$0.54. Dozen..D.P. \$5.78	
No. 2103. Gibson Quality Inside Patch, 4½-inch, each	.45
Each..D.P. \$0.66. Dozen..D.P. \$7.22	
No. 2104. Gibson Quality Inside Patch, 5-inch, each	.50
Each..D.P. \$0.78. Dozen..D.P. \$8.88	

Full Formed Inside Patch. A good strong 6 and 7-ply wrapped type patch with flaps locking over both beads. Being full formed makes it fit the casing correctly.



No. 2200. Gibson Quality Inside Patch, 3-inch, each	\$0.40
Each..D.P. \$0.60. Dozen..D.P. \$6.66	
No. 2201. Gibson Quality Inside Patch, 3½-inch, each	.55
Each..D.P. \$0.78. Dozen..D.P. \$8.56	
No. 2202. Gibson Quality Inside Patch, 4-inch, each	.60
Each..D.P. \$0.88. Dozen..D.P. \$9.78	
No. 2203. Gibson Quality Inside Patch, 4½-inch, each	.75
Each..D.P. \$1.06. Dozen..D.P. \$11.56	
No. 2204. Gibson Quality Inside Patch, 5-inch, each	.80
Each..D.P. \$1.20. Dozen..D.P. \$13.32	



This is an extra fine moulded patch made of 6 plies of heavy fabric with rubber tip ends.

No. 2300. Gibson Quality Moulded Patch, 3-inch, each	\$0.55
Each..D.P. \$0.84. Dozen..D.P. \$9.34	
No. 2301. Gibson Quality Moulded Patch, 3½ or 4-inch, each	.75
Each..D.P. \$1.16. Dozen..D.P. \$12.56	
No. 2302. Gibson Quality Moulded Patch, 4½ or 5-inch, each	1.00
Each..D.P. \$1.50. Dozen..D.P. \$16.34	

Gibson Quality Patches



This boot is full formed with gray rubber tread and sides and is fitted with large strong eyelets.

No. 2400. Gibson Quality Lace-on Boot, 3-inch, each	\$0.70
Each..D.P. \$1.00. Dozen..D.P. \$11.10	
No. 2401. Gibson Quality Lace-on Boot, 3½-inch, each	.80
Each..D.P. \$1.20. Dozen..D.P. \$13.32	
No. 2402. Gibson Quality Lace-on Boot, 4-inch, each	.95
Each..D.P. \$1.40. Dozen..D.P. \$15.22	
No. 2403. Gibson Quality Lace-on Boot, 4½-inch, each	1.05
Each..D.P. \$1.60. Dozen..D.P. \$17.34	
No. 2404. Gibson Quality Lace-on Boot, 5-inch, each	1.25
Each..D.P. \$1.82. Dozen..D.P. \$19.74	

Holds rim cuts as well as tread blow-outs. Made with gray rubber sides and tread and double rivet hooks.



No. 2500. Gibson Quality Hook-on Clincher Boot, 3-inch, each	\$0.70
Each..D.P. \$1.00. Dozen..D.P. \$11.10	
No. 2501. Gibson Quality Hook-on Clincher Boot, 3½-inch, each	.80
Each..D.P. \$1.20. Dozen..D.P. \$13.32	
No. 2502. Gibson Quality Hook-on Clincher Boot, 4-inch, each	.95
Each..D.P. \$1.40. Dozen..D.P. \$15.22	
No. 2503. Gibson Quality Hook-on Clincher Boot, 4½-inch, each	1.05
Each..D.P. \$1.60. Dozen..D.P. \$17.34	
No. 2504. Gibson Quality Hook-on Clincher Boot, 5-inch, each	1.25
Each..D.P. \$1.82. Dozen..D.P. \$19.74	



No. 2600. Gibson Quality Hook-on Boot, Straight Side, 3-inch, each	\$0.70
Each..D.P. \$1.00. Dozen..D.P. \$11.10	
No. 2601. Gibson Quality Hook-on Boot, Straight Side, 3½-inch, each	.80
Each..D.P. \$1.20. Dozen..D.P. \$13.32	
No. 2602. Gibson Quality Hook-on Boot, Straight Side, 4-inch, each	.95
Each..D.P. \$1.40. Dozen..D.P. \$15.22	
No. 2603. Gibson Quality Hook-on Boot, Straight Side, 4½-inch, each	1.05
Each..D.P. \$1.60. Dozen..D.P. \$17.34	
No. 2604. Gibson Quality Hook-on Boot, Straight Side, 5-inch, each	1.25
Each..D.P. \$1.82. Dozen..D.P. \$19.74	



BLOW-OUT PATCHES

Red Line Patches

Made of 6 and 7 plies of red rubber fabric, with feather edge white rubber ends, so cannot damage inner tube. One of the very finest inside patches made, extra heavy, full formed and with flaps locking over both beads.



Red Line Inner Patch, 3-inch, each	\$0.55
Each..D.P. \$0.74 Dozen..D.P.	\$8.00
Red Line Inner Patch, 3½-inch, each	0.65
Each..D.P. \$0.94 Dozen..D.P.	\$10.12
Red Line Inner Patch, 4-inch, each	0.80
Each..D.P. \$1.06 Dozen..D.P.	\$11.46
Red Line Inner Patch, 4½-inch, each	0.90
Each..D.P. \$1.26 Dozen..D.P.	\$13.60
Red Line Inner Patch, 5-inch, each	1.00
Each..D.P. \$1.44 Dozen..D.P.	\$15.74

Red Line Lace-On Boots

This is a much finer and heavier boot than the ordinary Lace-on and is full formed with the grommets strongly reinforced, and with a triple thick red rubber tread.



Red Line Lace-on Boot, 3-inch, each	\$1.00
Each..D.P. \$1.56 Dozen..D.P.	\$16.80
Red Line Lace-on Boot, 3½-inch, each	1.25
Each..D.P. \$1.86 Dozen..D.P.	\$20.26
Red Line Lace-on Boot, 4-inch, each	1.50
Each..D.P. \$2.20 Dozen..D.P.	\$23.74
Red Line Lace-on Boot, 4½-inch, each	1.65
Each..D.P. \$2.48 Dozen..D.P.	\$26.66
Red Line Lace-on Boot, 5-inch, each	1.90
Each..D.P. \$2.80 Dozen..D.P.	\$32.54

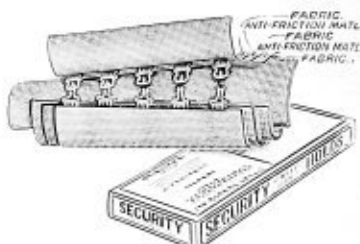
Red Line Hook-On Boots

Made with special hooks which are easily adjustable to take care of the difference in tire size, thus insuring a perfect fit. Has an extra outside screw plate and reinforced edges, making it impossible for hooks to pull out. Extra quality throughout, with triple thick red rubber tread and white rubber sides. Packed singly in cartons including inside patch.



Red Line Hook-on Outer Boot, 3-inch, each	\$1.00
Each..D.P. \$1.56 Dozen..D.P.	\$16.50
Red Line Hook-on Outer Boot, 3½-inch, each	1.25
Each..D.P. \$1.86 Dozen..D.P.	\$20.26
Red Line Hook-on Outer Boot, 4-inch, each	1.50
Each..D.P. \$2.20 Dozen..D.P.	\$23.74
Red Line Hook-on Outer Boot, 4½-inch, each	1.65
Each..D.P. \$2.48 Dozen..D.P.	\$26.66
Red Line Hook-on Outer Boot, 5-inch, each	1.90
Each..D.P. \$2.80 Dozen..D.P.	\$32.54

Security Blow-Out Holder



The New Security Blow-Out Holder is positively the last word in Blow-Out Holders. Experience demonstrates that the principle is right.

It is a piece of special cotton duck fabric, cut on the bias in a peculiar shape, folded and fitted with clasps to clasp around the inner tube. Being cut on the bias, the fabric will give enough to nest smoothly in the outer casing.

There is a flap on the inside for protection from any possible injury from the clasps, also a flap on the outside to protect the inside of the casing.

Between each layer of fabric is placed a flexible, smooth-surfaced material (see cut), which does away with all friction and prevents creeping.

The layers of fabric are of different lengths; this positively eliminates any possible chance of pinching the inner tube.

Security Blow-Out Holder, 3-inch, each	\$0.75
Each..D.P. \$1.10 Dozen..D.P.	\$12.00

Security Blow-Out Holder, 3½-inch and all larger sizes, each	1.00
Each..D.P. \$1.50 Dozen..D.P.	\$16.10

Kant-Blo Inside Patch

This is the highest grade and strongest patch made. Perfect fitting. It is entirely different. This patch is made with a layer of Chrome Tanned Leather (specially treated) between two layers of the highest grade of fabric. The leather is equal in strength to 14 plies of fabric. It is not necessary to carry a spare tire if a Kant-Blo patch is carried in the car.

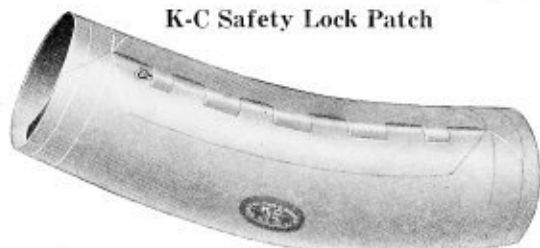


Kant-Blo Inside Patch, 3-inch, each	\$1.00
Each..D.P. \$1.44 Dozen..D.P.	\$16.00
Kant-Blo Inside Patch, 3½-inch, each	1.00
Each..D.P. \$1.66 Dozen..D.P.	\$18.66
Kant-Blo Inside Patch, 4-inch, each	1.25
Each..D.P. \$1.78 Dozen..D.P.	\$20.00
Kant-Blo Inside Patch, 4½-inch, each	1.25
Each..D.P. \$2.18 Dozen..D.P.	\$24.00
Kant-Blo Inside Patch, 5-inch, each	1.50
Each..D.P. \$2.34 Dozen..D.P.	\$26.66



BLOW-OUT PATCHES

K-C Safety Lock Patch



A patch that will hold the largest blow-out—you might cut away a section of the casing from head to head and this patch, safely locked on, will hold its own pressure.

The K-C Safety Lock Patch completely encircles the inner tube, protecting it at every point—the "Safety Lock" feature absolutely prevents the patch from "spreading"—it can not bulge out through the blow-out hole—blow-outs "stay small" with the "Safety Lock" on the job.

K-C Safety Lock Patch, 3-inch, length, 10 inches, each.....	\$1.00
Each, D.P. \$1.20. Dozen, D.P. \$13.32.	
K-C Safety Lock Patch, 3½-inch, length, 10 inches, each.....	1.35
Each, D.P. \$1.50. Dozen, D.P. \$16.06.	
K-C Safety Lock Patch, 4-inch, length, 10 inches, each.....	1.50
Each, D.P. \$1.88. Dozen, D.P. \$21.10.	
K-C Safety Lock Patch, 4½-inch, length, 10 inches, each.....	1.75
Each, D.P. \$2.22. Dozen, D.P. \$24.00.	
K-C Safety Lock Patch, 5-inch, length, 10 inches, each.....	2.00
Each, D.P. \$2.78. Dozen, D.P. \$30.00.	

K-C "No-Stretch" Boot



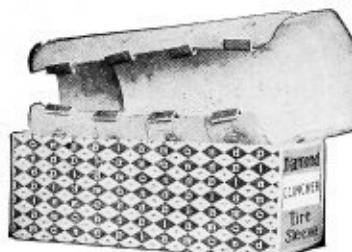
ONE LAYER CHROME LEATHER
TWO LAYERS TIRE FABRIC

The only boot that combines the wearing strength of steel-studded leather and the water resisting qualities of a rubber boot—it is in a class by itself—the one boot that perfectly meets every condition of service.

Made with Adjustable Hooks in Clincher and straight Side or Dunlop Styles, in all sizes, to meet every requirement. Length, 7 to 9 inches.

K-C No-Stretch Leather Boot, 3-inch, each.....	\$1.35
Each, D.P. \$2.34. Dozen, D.P. \$26.66.	
K-C No-Stretch Leather Boot, 3½-inch, each.....	1.45
Each, D.P. \$2.48. Dozen, D.P. \$27.78.	
K-C No-Stretch Leather Boot, 4-inch, each.....	1.70
Each, D.P. \$2.66. Dozen, D.P. \$29.54.	
K-C No-Stretch Leather Boot, 4½-inch, each.....	1.90
Each, D.P. \$2.88. Dozen, D.P. \$33.34.	
K-C No-Stretch Leather Boot, 5-inch, each.....	2.10
Each, D.P. \$3.00. Dozen, D.P. \$34.44.	

Diamond Tire Sleeve



Made of the best quality of rubber and Sea Island fabric, the Diamond Tire Sleeve has the highest degree of wearing resistance. Absolutely will not creep or move and covers every portion of the tire exposed.

Diamond Hook-On Tire Sleeves, 3-inch, each.....	\$1.00
Each, D.P. \$1.44.	
Diamond Hook-On Tire Sleeves, 3½-inch, each.....	1.25
Each, D.P. \$1.56.	

Diamond Hook-On Tire Sleeves, 4-inch, each.....	1.50
Each, D.P. \$1.88.	
Diamond Hook-On Tire Sleeves, 4½-inch, each.....	1.75
Each, D.P. \$2.56.	
Diamond Hook-On Tire Sleeves, 5-inch, each.....	2.00
Each, D.P. \$2.78.	

Firestone Inside Blow-Out Patches



The Firestone Blow-Out Patch is made with extra strength and stiffness, and will hold any ordinary cut or blow-out without help of an outside boot. The flaps, which fit snugly around the bead of the tire, hold the patch firmly in place.

Firestone Inside Blow-Out Patches, 3x10 inches, each.....	\$0.65
Each, D.P. \$0.78	
Firestone Inside Blow-Out Patches, 3½x10 inches, each.....	.75
Each, D.P. \$0.88	
Firestone Inside Blow-Out Patches, 4x10 inches, each.....	.95
Each, D.P. \$1.10	
Firestone Inside Blow-Out Patches, 4½x10 inches, each.....	1.00
Each, D.P. \$1.26	
Firestone Inside Blow-Out Patches, 5x10 inches, each.....	1.15
Each, D.P. \$1.34	

Firestone Hook-On Boots

Firestone Hook-On Boot has the same toughness of tread for which Firestone tires are famous, and has the quality of fabric that gives strength for any temporary trip, no matter how exacting the test.



Firestone Hook-On Boots, 3-inch, each.....	\$1.00
Each, D.P. \$1.34	
Firestone Hook-On Boots, 3½-inch, each.....	1.10
Each, D.P. \$1.66	
Firestone Hook-On Boots, 4-inch, each.....	1.25
Each, D.P. \$1.78	
Firestone Hook-On Boots, 4½-inch, each.....	1.40
Each, D.P. \$1.88	
Firestone Hook-On Boots, 5-inch, each.....	1.50
Each, D.P. \$2.00	

Firestone Lace-On Boot

It differs from the Hook-On Boot already described only in the manner of it being attached, since it has all the strength, toughness and service features of the regular Firestone building.



Firestone Lace-On Boots, 3-inch, each.....	\$1.10
Each, D.P. \$1.44	
Firestone Lace-On Boots, 3½ and 4-inch, each.....	1.25
Each, D.P. \$1.66	
Firestone Lace-On Boots, 4½ and 5-inch, each.....	1.50
Each, D.P. \$1.88	



TIRE PROTECTORS

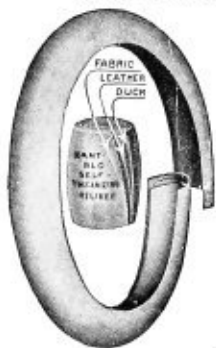


Gibson Quality Lapped End Reliners

Lapped End Reliners will double the life of any casing, old or new. Users have secured from 1,000 to 2,500 miles from old, worn-out casings ready to be discarded. Made of extra quality moulded on regular tire light-weight duck and cores, they fit perfectly. Outside covered with our self-vulcanizing preparation, the Reliner becomes, in use, cemented to and a part of the casing. Can not creep, buckle or chafe tube. We recommend their use.

Size.	Ply.	Retail Price.	Size.	Ply.	Retail Price.
28 x 3	3	\$3.20	35 x 4	3	\$5.80
Each, D.P. \$2.84			Each, D.P. \$5.16		
30 x 3	3	3.40	36 x 4	3	6.00
Each, D.P. \$3.02			Each, D.P. \$5.34		
32 x 3	3	3.60	37 x 4	3	6.25
Each, D.P. \$3.20			Each, D.P. \$5.56		
30 x 3 1/2	3	4.00	40 x 4	3	6.80
Each, D.P. \$3.56			Each, D.P. \$6.04		
31 x 3 1/2	3	4.20	32 x 4 1/2	4	5.60
Each, D.P. \$3.74			Each, D.P. \$4.98		
32 x 3 1/2	3	4.40	34 x 4 1/2	4	5.80
Each, D.P. \$3.90			Each, D.P. \$5.16		
34 x 3 1/2	3	4.80	35 x 4 1/2	4	6.00
Each, D.P. \$4.26			Each, D.P. \$5.34		
36 x 3 1/2	3	5.20	36 x 4 1/2	4	6.20
Each, D.P. \$4.62			Each, D.P. \$5.50		
30 x 4	3	4.80	37 x 4 1/2	4	6.50
Each, D.P. \$4.26			Each, D.P. \$5.78		
31 x 4	3	5.00	34 x 5	5	6.80
Each, D.P. \$4.44			Each, D.P. \$6.04		
32 x 4	3	5.20	35 x 5	5	7.00
Each, D.P. \$4.62			Each, D.P. \$6.22		
33 x 4	3	5.40	36 x 5	5	7.20
Each, D.P. \$4.80			Each, D.P. \$6.40		
34 x 4	3	5.60	37 x 5	5	7.40
Each, D.P. \$4.98			Each, D.P. \$6.58		

Kant-blo Self-Vulcanizing Reliner

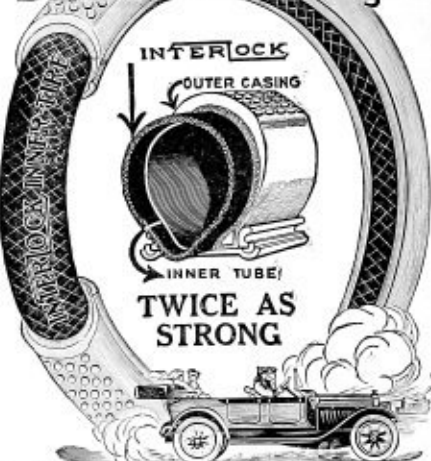


Differ in construction from every other protective device obtainable. A layer of specially prepared leather between two layers of the best Egyptian fabric makes punctures and blow-outs impossible.

Once inserted, you can forget you have tires until they are worn through tire, fabric and innerliner. Users have secured 7,000 to 14,000 miles from new casings by the use of Kant-blo innerliners and from 1,500 to 3,500 miles from old casings.

Size.	Retail Price.	Size.	Retail Price.
28 x 3	\$5.50	34 x 4	\$10.00
Each, D.P. \$8.56		Each, D.P. \$15.56	
30 x 3	7.00	35 x 4	10.50
Each, D.P. \$10.88		Each, D.P. \$16.34	
32 x 3	7.25	36 x 4	11.00
Each, D.P. \$11.26		Each, D.P. \$17.10	
34 x 3	7.50	37 x 4	11.50
Each, D.P. \$11.46		Each, D.P. \$17.88	
30 x 3 1/2	8.00	32 x 4 1/2	10.50
Each, D.P. \$12.44		Each, D.P. \$16.34	
34 x 3 1/2	8.25	33 x 4 1/2	11.00
Each, D.P. \$12.82		Each, D.P. \$17.10	
32 x 3 1/2	8.50	34 x 4 1/2	11.50
Each, D.P. \$13.22		Each, D.P. \$17.88	
34 x 3 1/2	9.00	35 x 4 1/2	12.00
Each, D.P. \$14.00		Each, D.P. \$18.66	
30 x 4	8.50	36 x 4 1/2	12.50
Each, D.P. \$13.22		Each, D.P. \$19.44	
31 x 4	8.75	37 x 4 1/2	12.75
Each, D.P. \$13.60		Each, D.P. \$18.04	
32 x 4	9.00	34 x 5	13.00
Each, D.P. \$14.00		Each, D.P. \$20.22	
33 x 4	9.50	35 x 5	13.50
Each, D.P. \$14.78		Each, D.P. \$21.40	
		36 x 5	14.00
		Each, D.P. \$21.78	
		37 x 5	14.50
		Each, D.P. \$22.56	
		38 x 5 1/2	14.50
		Each, D.P. \$22.56	

Extra Heavy Red INTERLOCKS Double Your Mileage



Ordinarily, tires only give a few months' real satisfaction while practically new—then comes a long period of uncertainty, dissatisfaction and trouble, due to weakened or broken fabric—until finally after paying more than the cost of an Interlock for blow-out repairs the tire is discarded often with not more than half the tread rubber worn off. Red Interlocks change this whole condition by simply bringing the tire back to new strength, thus making it blow-out proof, practically puncture proof, and as safe as a new tire at much less cost.

The use of a new specially woven, "Heavier than Tire" fabric in "Red" Interlocks makes them "twice as strong" and enables us to positively guarantee your satisfaction.

Size.	Retail Price.	Size.	Retail Price.
28 x 3	\$4.50	36 x 4	\$9.00
Each, D.P. \$7.92		Each, D.P. \$15.20	
30 x 3	4.90	37 x 4	9.25
Each, D.P. \$8.60		Each, D.P. \$15.66	
30 x 3 1/2	5.85	34 x 4 1/2	10.70
Each, D.P. \$10.29		Each, D.P. \$17.86	
31 x 3 1/2	6.10	35 x 4 1/2	11.00
Each, D.P. \$10.56		Each, D.P. \$18.40	
32 x 3 1/2	6.30	36 x 4 1/2	11.35
Each, D.P. \$10.94		Each, D.P. \$18.92	
34 x 3 1/2	6.75	37 x 4 1/2	11.65
Each, D.P. \$11.72		Each, D.P. \$19.40	
31 x 4	7.65	35 x 5	12.45
Each, D.P. \$12.94		Each, D.P. \$20.48	
32 x 4	7.90	36 x 5	12.85
Each, D.P. \$13.58		Each, D.P. \$21.08	
33 x 4	8.20	37 x 5	13.20
Each, D.P. \$13.84		Each, D.P. \$21.66	
34 x 4	8.45	37 x 5 1/2	14.75
Each, D.P. \$14.28		Each, D.P. \$24.26	
35 x 4	8.75		
Each, D.P. \$14.76			

Firestone Flaps



A flap to protect the tube in Clincher or Straight Side tires that has enough shape and body to take its place easily and hold it; made from high grade material, with enough of that material in them to form a real protection, to give permanent shape and let them keep their places.

Flaps for 3-inch Tires, each	\$.85
Each, D.P. \$1.55	
Flaps for 3 1/2-inch Tires, each	1.15
Each, D.P. \$1.74	
Flaps for 4-inch Tires, each	1.50
Each, D.P. \$2.55	
Flaps for 4 1/2-inch Tires, each	1.60
Each, D.P. \$3.00	
Flaps for 5-inch Tires, each	1.75
Each, D.P. \$3.20	



REPAIR MATERIAL

Tire-Doh



Save nine-tenths of tire repair expense. Permanently repairs punctures in the shop or on the road. No tools or heat needed—nothing but two hands and a Tire-doh Outfit. Better, quicker and easier than vulcanizing. Costs a tenth as much. Any car owner can repair his own punctures and blow-outs in tube, or cuts in casing. Takes only 15 minutes for a puncture. Costs only 2 cents. Increases tire mileage by curing small cuts in casing treads.

Tire-Doh Outfit, each.....\$1.00
Dozen...D.P. \$18.88

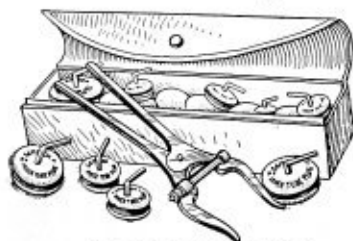
Diamond Quick-Acting Cementless Patch



An immediate repair; permanent and clean. No tedious waiting for cement to dry. Simply clean puncture thoroughly, apply patch, insert tube and go ahead. The heat engendered by running the tire securely vulcanizes the patch, making it a durable, efficient repair.

One dozen in screw cover box, with emery cloth and full instructions for use, per box.....\$0.60
Dozen Boxes...D.P. \$7.33

Tire Repair Tools



The Sampson Repair Kit

No. 1 Sampson Repair Outfit, containing tool and half dozen assorted plugs, in carton, each.....\$1.50
Each...D.P. \$2.22
No. 2 Sampson Repair Kit, as illustrated, containing tool and one dozen assorted plugs in permanent kit, each.....2.50
Each...D.P. \$3.88
No. 3 Sampson Repair Plugs, per dozen.....1.75
Per dozen...D.P. \$2.78
No. 4 Sampson Repair Tool, each......50
Each...D.P. \$0.77

Sampson Repair Plug for Automobile Inner Tubes. The quickest permanent repair ever devised. Requires no cement, no cleaning, no gasoline, just the bare hands; has been tested to the limit and never found wanting.

Narco Rubber Reviver and Refinisher

A liquid rubber compound combined with other ingredients of a highly beneficial nature to anything of rubber or fabric—waterproofs, revives and refinishes.

Ideal for all automobile and vehicle tops. Applied with a brush—lasts a long time—will not crack. Not one of those varnishy things—greatly improves the appearance of the car.

7-ounce Can—enough for waterproofing and reviving boots, coats or other rubber goods\$0.50
Dozen...D.P. \$8.88

1-quart Can—enough for a large vehicle top or auto top.....2.00
Dozen...D.P. \$35.56



Narco Tire Cut Filler

The Motorist's Self-Vulcanizer

A very heavy rubber compound that fills the cuts and holes—solidifies quickly and becomes a part of the tire.

Narco Tire Cut Filler welds itself to the walls of the cut, becoming an integral part of the tire—a union so perfect no road abuse can remove it.

Narco Tire Cut Filler in large tubes, each.....\$1.00
Dozen...D.P. \$17.78



Tirenew

Tirenew prevents tire decay. A compound of pure rubber in liquid form. Upon application to the tire, it flows into the small cuts and crevices and waterproofs the exposed fabric, preventing decay. Should be used in conjunction with Narco Tire Cut Filler.

Causes the tire to look clean and new, giving the entire car a well-groomed appearance.

Ideal for spares, protecting them from injurious atmospheric influences. Supplied in both white and tire gray.



TIRENEW COSTS

One 12-ounce Can, will coat five tires\$0.50
Dozen...D.P. \$8.88
One quart Can, will coat twelve tires1.15
Dozen...D.P. \$20.44
One 2-gallon Pail, will coat twenty-four tires2.15
Dozen...D.P. \$38.22
One Gallon Pail, will coat forty-eight tires4.00
Dozen...D.P. \$71.10

Adamson Repair Gum

This Vulcanizing Rubber is especially prepared for use with Adamson Vulcanizers.

It has proven to have many advantages in general repair work.

A high-grade repair stock for use in repairing both tubes and casings. Adamson Repair Gum is compounded so as to give a perfect adhesion without the use of cement.



Repair Kit Rolls, per dozen\$2.00
Dozen...D.P. \$3.32
One-fourth Pound Rolls, each50
Dozen...D.P. \$9.32
One-half Pound Rolls, each1.00
Dozen...D.P. \$18.64



Gibson Quality No-Cement Patches

WHEN THE MOTORIST has but one tube in each tire, and suffers a puncture on the road, he is confronted with the necessity of getting home, and if he runs his tire flat there is no question but what he will ruin the casing. Here is the solution—Gibson Quality No-Cement Patches. With these patches a puncture can be fixed in ten



minutes' time and without the use of a vulcanizer. All that is necessary is to clean the punctured place with a little gasoline, applying a very small quantity of the gas to the patch. Place the patch on the punctured place, press down firmly with the hand. Allow to dry for about five minutes, place the tube in the casing, inflate and drive away. The heat caused by the friction of the tire on the road will make a permanent and neat repair.

These patches are made from highest quality materials and are used by many garage and repairmen for repairing tubes brought to them for fixing. They are made in red and gray.



Every dealer should carry a large stock of these patches. They are ready sellers, and as every motorist is learning the necessity for carrying a box in his tool kit, you can work up a nice, steady trade on this article.

Gibson Quality Gray No-Cement Patches, per box	\$0.75
Dozen . . . D.P.	\$4.00
Gibson Quality Red No-Cement Patches, per box	1.00
Dozen . . . D.P.	\$8.00



TIRE TAPE, TALC AND MICA

Gibson Quality Tire Tape

Every garage, repair shop and motorist has constant need for a first-class high-grade tire tape. There are many grades offered, but unless they are carefully made they refuse to adhere for any length of time. The principal essentials in the selection of tape should be its adhesiveness, a high grade cotton tape as a base, and the whole to be thoroughly waterproof.

Gibson Quality Tire Tape is the best manufactured. It is manufactured over an improved process, is warranted to be absolutely waterproof, and to give the very best results. It is highly adhesive and will stick where "put."



- No. 1 Gibson Quality Tire Tape, one ounce rolls, 1-in., per pound\$0.60
Per Pound...D.P. \$0.66
25-lb. lots, per pound...D.P. \$0.55
- No. 2 Gibson Quality Tire Tape, four ounce rolls, 1-in., per pound60
Per Pound...D.P. \$0.66
25-lb. lots, per pound...D.P. \$0.55
- No. 3 Gibson Quality Tire Tape, eight ounce rolls, 1-in., per pound60
Per Pound...D.P. \$0.66
25-lb. lots, per pound...D.P. \$0.55

Tape in Tin Boxes



- No. 30 Gibson Quality Tire Tape, 1 1/2-in., 8-ounce roll in tin box, per pound\$1.00
Per Pound...D.P. \$0.78
25-lb. lots, per pound...D.P. \$0.66

Gibson Quality Tire Talc

No tube should ever be placed in a casing without first sifting some talc or mica powder over the entire inner surface of the casing. Unless some material of this kind is employed, the tube is liable to pinch and grind, but the most serious possibility is the sticking of the tube to the casing. When the car is driven any distance, the friction of the tires on the road sets up a very high heat which (unless some good quality talc or mica powder is used) will soften the tube and cause it to stick to the casing.

The Gibson Quality Talc is of the very highest grade. It is ground to extra fineness, contains no lumps or grit. It is recommended for this purpose.

Gibson Quality Tire Talc is packed in 2x7-in. cans with sifting top. Will not sift out in repair kit.



- Each\$0.15
Dozen...D.P. \$1.32 Gross...D.P. \$14.44

Gibson Quality Mica Powder



Some prefer mica powder for the prevention of friction and sticking. We recommend Gibson Quality Mica Powder as being the very best obtainable for the purpose. Is from selected mica, ground to a very fine powder. Is guaranteed not to cake.

Gibson Quality Mica Powder is packed in sifting top cans, 2x7-in.

- Each\$0.15
Dozen...D.P. \$1.66 Gross...D.P. \$17.60



CEMENTS

Michelin Cement



Michelin Pure Gum Cement, 1-ounce tubes, each	\$0.10
Dozen..D.P.	\$1.10
Michelin Pure Gum Cement, 2-ounce tubes, each	.15
Dozen..D.P.	\$1.66
Michelin Pure Gum Cement, 1-pint cans, each	.35
Dozen..D.P.	\$4.00
Michelin Pure Gum Cement, 1/2-pint cans, each	.60
Dozen..D.P.	\$6.66
Michelin Pure Gum Cement, 1-pint cans, each	1.00
Dozen..D.P.	\$13.34

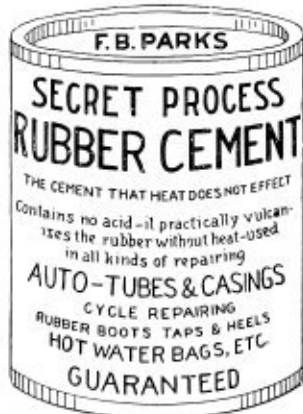
Michelin Mastic



(Put up in wide-mouth, seal-top, 2-ounce cans.)

Michelin Mastic, 2-ounce cans, each	\$0.40
Dozen..D.P.	\$6.66

Parks' Cement



The repair man's delight—Parks' Cement—4-ounce cans, each	\$0.25
Dozen..D.P.	\$4.44

Goodrich Rubber Cement—No. 1 Heavy



For repairing and splicing inner tubes. Possesses great strength and is very effective. A self-curing cement. In 1/4, 1/2, 1-pint, 1-quart and 1-gallon cans.

No. 1 Goodrich Rubber Cement, 1/4-pint cans, each	\$0.15
Dozen..D.P.	\$2.66
No. 1 Goodrich Rubber Cement, 1/2-pint cans, each	.25
Dozen..D.P.	\$4.66
No. 1 Goodrich Rubber Cement, pint cans, each	.45
Dozen..D.P.	\$8.88
No. 1 Goodrich Rubber Cement, quart cans, each	.90
Dozen..D.P.	\$16.66
No. 1 Goodrich Rubber Cement, gallon cans, each	3.40
Each..D.P.	\$5.34

No. 4 Goodrich Patching Cement

No. 4 Goodrich Patching Cement, in tubes 1x4 inches, each	\$0.05
Dozen..D.P.	\$0.80
No. 4 Goodrich Patching Cement, in tubes 1x4 inches, each	.10
Dozen..D.P.	\$1.34

Goodrich Vulcanizing Cement, No. 434



A shop repair cement used in connection with steam vulcanizers. Long recognized as a standard cement. For general repairs on tubes and cases. Dries in two hours. 1-pint, 1/2-pint, 1-pint, 1-quart and 1-gallon cans.

No. 434 Goodrich Vulcanizing Cement, 1-pint cans, each	\$0.20
Dozen..D.P.	\$3.34
No. 434 Goodrich Vulcanizing Cement, 1/2-pint cans, each	.35
Dozen..D.P.	\$5.56
No. 434 Goodrich Vulcanizing Cement, 1-pint cans, each	.65
Dozen..D.P.	\$10.00
No. 434 Goodrich Vulcanizing Cement, quart cans, each	1.25
Dozen..D.P.	\$18.66
No. 434 Goodrich Vulcanizing Cement, gallon cans, each	4.95
Each..D.P.	\$5.78



CEMENTS

Diamond Titan Cement



Diamond Titan Patching Cement, 1x4 tubes, each.....	\$0.05
Dozen..D.P.	\$0.66
Diamond Titan Patching Cement, 1x4 tubes, each.....	.97
Dozen..D.P.	\$1.00
Diamond Titan Patching Cement, 1-pint cans, each.....	.15
Dozen..D.P.	\$2.00
Diamond Titan Patching Cement, 1-pint cans, each.....	.25
Dozen..D.P.	\$3.34
Diamond Titan Patching Cement, pint cans, each.....	.35
Dozen..D.P.	\$6.10
Diamond Titan Patching Cement, quart cans, each.....	.65
Dozen..D.P.	\$11.44
Diamond Titan Patching Cement, gallon cans, each.....	2.50
Each..D.P.	\$3.66

Diamond M638X Vulcanizing Cement



Diamond M638X Vulcanizing Cement, 1-pint cans, each....	\$0.20
Dozen..D.P.	\$2.88
Diamond M638X Vulcanizing Cement, 1-pint cans, each....	.30
Dozen..D.P.	\$5.00
Diamond M638X Vulcanizing Cement, pint cans, each.....	.50
Dozen..D.P.	\$9.44
Diamond M638X Vulcanizing Cement, quart cans, each....	.95
Dozen..D.P.	\$18.34
Diamond M638X Vulcanizing Cement, gallon cans, each..	3.45
Each..D.P.	\$5.12

Diamond Sealite



Diamond Sealite for repairing cuts in casings, 2-ounce cans.	
Each.....	\$0.40
Dozen..D.P.	\$5.56

Firestone Para Dry Patching Cement

This cement spreads easily and uniformly. It is to be applied to both surfaces that are to be welded together.

No. 1043 Firestone Para Patching Cement, in tubes 1x4 inches, each \$0.10
Dozen..D.P. \$1.10

No. 1043 Firestone Para Patching Cement, in tubes 1x6 inches, each...15
Dozen..D.P. \$1.78

No. 1043 Firestone Para Patching Cement, in 1-pint cans, each.....20
Dozen..D.P. \$2.66

No. 1043 Firestone Para Patching Cement, in 1-pint cans, each.....35
Dozen..D.P. \$4.00

No. 1043 Firestone Para Patching Cement, in pint cans, each.....50
Dozen..D.P. \$6.06



Firestone Vulcanizing Cement



Firestone Gums and solvent are given the laboratory test for purity and efficiency. The dissolving and mixing are done by scientific methods, on a big scale, and the operators are experts who devote their entire time to this work.

No. 1086 Firestone Vulcanizing Cement, 1-pint cans, each..\$0.20
Dozen..D.P. \$2.40

No. 1086 Firestone Vulcanizing Cement, 1-pint cans, each..35
Dozen..D.P. \$4.26

No. 1086 Firestone Vulcanizing Cement, pint cans, each...65
Dozen..D.P. \$8.00

No. 1086 Firestone Vulcanizing Cement, quart cans, each..1.25
Dozen..D.P. \$17.34

Firestone "Cure-Cut"



To neglect a small cut in the tire is to rob yourself mileage. Sand, grit and moisture will work into such a cut and form blisters under the tread, which eventually results in tread separation.

Firestone Cure-Cut, each.....\$0.40
Dozen..D.P. \$5.34



REPAIR MATERIALS

Firestone Tread Gum

These gums are for repairing tread cuts, putting in new sections of tread or for complete retreading.

- | | |
|---|--------|
| No. 1097 Firestone Tread Gum, $\frac{1}{4}$ -lb. rolls, each..... | \$0.50 |
| Cures Slate Gray. One-sixteenth gauge. | |
| Each.....D.P. | \$0.60 |
| No. 1097 Firestone Tread Gum, $\frac{1}{2}$ -lb. rolls, each..... | .85 |
| Cures Slate Gray. One-sixteenth gauge. | |
| Each.....D.P. | \$1.10 |
| No. 1097 Firestone Tread Gum, 1-lb. rolls, each..... | 1.40 |
| Cures Slate Gray. One-sixteenth gauge. | |
| Each.....D.P. | \$2.00 |
| No. 1200 Firestone Tread Gum, $\frac{1}{4}$ -lb. rolls, each..... | .50 |
| Cures Light Gray. One-sixteenth gauge. | |
| Each.....D.P. | \$0.60 |
| No. 1200 Firestone Tread Gum, $\frac{1}{2}$ -lb. rolls, each..... | .85 |
| Cures Light Gray. One-sixteenth gauge. | |
| Each.....D.P. | \$1.10 |
| No. 1200 Firestone Tread Gum, 1-lb. rolls, each..... | 1.40 |
| Cures Light Gray. | |
| Each.....D.P. | \$2.00 |

No. 1200 is especially recommended for use with small gasoline vulcanizers.

Firestone Cushion Gum

This highest grade Firestone treated rubber, built in between fabric and tread, insures an inseparable union. The pure gum welds with the fabric body and the tread layer or breaker layer with a grip that holds. Being extra resisting, it absorbs the sudden shocks of travel and distributes the impact of stone or rut over a wide surface, preventing to a large extent the separation of the "repair" from the tire carcass.

- | | |
|---|--------|
| No. 1090 Firestone Cushion Gum, $\frac{1}{4}$ -lb. boxes, each..... | \$0.60 |
| One-thirty-second gauge. | |
| Each.....D.P. | \$0.78 |
| No. 1090 Firestone Cushion Gum, $\frac{1}{2}$ -lb. boxes, each..... | 1.00 |
| One-thirty-second gauge. | |
| Each.....D.P. | \$1.34 |
| No. 1090 Firestone Cushion Gum, 1-lb. boxes, each..... | 1.85 |
| One-thirty-second gauge. | |
| Each.....D.P. | \$2.66 |

Firestone Rebuilding Fabric

Firestone Rebuilding Fabric is light in weight but stronger than any requirement of service will ever demand.

It is frictioned with the regular extra high quality of gum, giving the Firestone long life and gripping strength.

- | | |
|--|--------|
| No. 8498 Firestone Rebuilding Fabric, 1-lb. boxes, each..... | \$2.00 |
| Frictioned two sides. Skim one side. | |
| Each.....D.P. | \$2.88 |
| No. 1398 Firestone Rebuilding Fabric, 1-lb. boxes, each..... | 2.00 |
| Frictioned two sides. | |
| Each.....D.P. | \$2.88 |





REPAIR MATERIALS

Firestone Combination Tube Gum

When a tube is so injured as to require a large patch the repair should be vulcanized.

Two styles of gum are necessary in this case.

Firestone Combination Tube Gum is so-called because one side is semi-cured, the other uncured. The advantage of this is apparent to the repair man at once. The semi-cured side forms the inside surface of the patch. No sticking to other side of tube.



No. 3686 Firestone Combination Gum, $\frac{1}{4}$ -lb. boxes, each	\$0.75
One-thirty-second gauge.	
Each...D.P. \$0.88	
No. 3686 Firestone Combination Gum, $\frac{1}{2}$ -lb. boxes, each	1.25
One-thirty-second gauge.	
Each...D.P. \$1.66	
No. 3686 Firestone Combination Gum, 1-lb. boxes, each	2.25
One-thirty-second gauge.	
Each...D.P. \$3.34	
No. 2054 Firestone Combination Gum, $\frac{1}{4}$ -lb. boxes, each	.60
One-thirty-second gauge.	
Each...D.P. \$0.78	
No. 2054 Firestone Combination Gum, $\frac{1}{2}$ -lb. boxes, each	1.00
One-thirty-second gauge.	
Each...D.P. \$1.34	
No. 2054 Firestone Combination Gum, 1-lb. boxes, each	2.00
One-thirty-second gauge.	
Each...D.P. \$2.78	

Firestone Tube Gum

This gum is used most largely in connection with Firestone Combination, just described, for vulcanizing tubes.

It is an uncured gum. When the inside patch has been made with the semi-cured gum, the cavity or outside depression is filled with this tube gum and the complete patch then vulcanized.

A tube so repaired is stronger at this point than ever. See illustration of filling in patch.

No. 1216 Firestone Tube Gum, $\frac{1}{4}$ -lb. boxes, each	\$0.65
One-thirty-second gauge.	
Each...D.P. \$0.78	
No. 1216 Firestone Tube Gum, $\frac{1}{2}$ -lb. boxes, each	1.25
One-thirty-second gauge.	
Each...D.P. \$1.34	
No. 1216 Firestone Tube Gum, 1-lb. boxes, each	2.25
One-thirty-second gauge.	
Each...D.P. \$2.78	

No. 1216 can be had in either red or black. When ordering, please state which is desired.



No. 1086 Firestone Tube Gum, $\frac{1}{4}$ -lb. boxes, each	\$0.65
One-thirty-second gauge.	
Each...D.P. \$0.88	
No. 1086 Firestone Tube Gum, $\frac{1}{2}$ -lb. boxes, each	1.25
One-thirty-second gauge.	
Each...D.P. \$1.66	
No. 1086 Firestone Tube Gum, 1-lb. boxes, each	2.25
One-thirty-second gauge.	
Each...D.P. \$3.00	

No. 1086 can be had in either red or black. When ordering, please state which is desired.



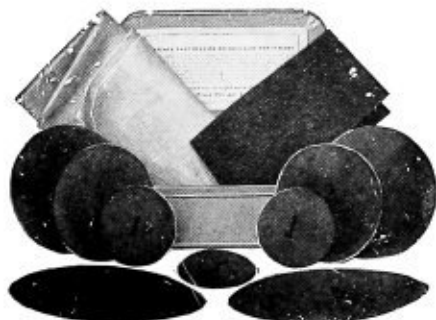
TIRE PATCHES

Goodyear White Seal Patches



- No. 3 Goodyear Repair Outfit, consisting of 15 assorted White Seal Patches in tin box, each.....\$0.75
 Each...D.P. \$0.88 Dozen...D.P. \$10.10
 No. 1 Goodyear White Seal Patches, 1½-inch, round, each... .04
 Dozen...D.P. \$0.54 Per 100...D.P. \$3.12
 No. 2 Goodyear White Seal Patches, 1½-inch, round, each... .05
 Dozen...D.P. \$0.60 Per 100...D.P. \$3.34
 No. 3 Goodyear White Seal Patches, 2½-inch, round, each... .06
 Dozen...D.P. \$0.66 Per 100...D.P. \$4.00
 No. 4 Goodyear White Seal Patches, 2½-inch, round, each... .08
 Dozen...D.P. \$0.88 Per 100...D.P. \$5.34
 No. 5 Goodyear White Seal Patches, 1½x3-inch, oval, each... .10
 Dozen...D.P. \$1.10 Per 100...D.P. \$5.78
 No. 6 Goodyear White Seal Patches, 2½x5-inch, oval, each... .12
 Dozen...D.P. \$1.22 Per 100...D.P. \$6.66
 No. 7 Goodyear White Seal Patches, 2½x5½-inch, oval, each... .15
 Dozen...D.P. \$1.54 Per 100...D.P. \$8.44
 No. 8 Goodyear White Seal Patches, 2½x6½-inch, oval, each... .20
 Dozen...D.P. \$1.56 Per 100...D.P. \$11.56

Goodyear No-Cement Patches



- No. 6 Goodyear Repair Outfit of assorted No-Cement Patches, in tin box, each.....\$0.75
 Each...D.P. \$0.88 Dozen...D.P. \$10.10
 No. 1 Goodyear No-Cement Patches, 1½-inch, round, each... .05
 Dozen...D.P. \$0.88 Per 100...D.P. \$6.22
 No. 2 Goodyear No-Cement Patches, 1½-inch, round, each... .06
 Dozen...D.P. \$1.00 Per 100...D.P. \$7.12
 No. 3 Goodyear No-Cement Patches, 2½-inch, round, each... .07
 Dozen...D.P. \$1.22 Per 100...D.P. \$8.44
 No. 4 Goodyear No-Cement Patches, 2½-inch, round, each... .08
 Dozen...D.P. \$1.34 Per 100...D.P. \$9.34
 No. 5 Goodyear No-Cement Patches, 1½x4-inch, oval, each... .09
 Dozen...D.P. \$1.44 Per 100...D.P. \$9.78
 No. 6 Goodyear No-Cement Patches, 2½x5-inch, oval, each... .11
 Dozen...D.P. \$1.66 Per 100...D.P. \$11.12
 No. 7 Goodyear No-Cement Patches, 2½x5½-inch, oval, each... .13
 Dozen...D.P. \$1.88 Per 100...D.P. \$12.44
 No. 8 Goodyear No-Cement Patches, 2½x6½-inch, oval, each... .16
 Dozen...D.P. \$2.00 Per 100...D.P. \$13.78

PATCHING MATERIALS



United States Cements and Patches

U. S. Heal-A-Cut, a plastic cement for repairing cuts in casings; put up in 2 ounce cans, each...\$0.40
 Dozen...D.P. \$5.88

United States Patching Cement

- No. 3 U. S. Patching Cement, in tubes, 3x4, each.....\$0.10
 Dozen...D.P. \$0.78
 No. 5 U. S. Patching Cement, in tubes, 1½x3, each..... .20
 Dozen...D.P. \$3.00
 U. S. Patching Cement, 1-pint cans, each..... .20
 Dozen...D.P. \$2.66
 U. S. Patching Cement, ½-pint cans, each..... .40
 Dozen...D.P. \$4.80
 U. S. Patching Cement, pint cans, each..... .75
 Dozen...D.P. \$8.88
 U. S. Patching Cement, quart cans, each..... 1.40
 Dozen...D.P. \$17.34
 U. S. Patching Cement, ½-gallon cans, each.....\$2.75
 Dozen...D.P. \$33.34
 U. S. Patching Cement, gallon cans, each..... 5.00
 Dozen...D.P. \$61.12



United States Tire Tape

- U. S. Auto Tire Tape, 1½ ins. wide, in half-pound rolls, each.....\$0.30
 Dozen...D.P. \$4.00
 U. S. Auto Tire Tape, 1½ ins. wide, 1-pound rolls, each... .60
 Dozen...D.P. \$8.00
 U. S. Auto Tire Tape, 1 in. wide, in ½-pound rolls, each... .30
 Dozen...D.P. \$4.00

United States Self-Cementing Patches

- U. S. Self-Cementing Patches, 12 assorted, three sizes, with emery paper, packed in neat screw top box, each....\$0.50
 Dozen...D.P. \$8.00



Rubber Roughener



Just the thing to roughen up the parts that want to be prepared before applying cement.
 Rubber Roughener, each.....\$0.20
 Dozen...D.P. \$2.66



TIRE PRESSURE GAUGES

No. 2 Pump Gauge



For use on all makes of pumps, furnished in brass or nickel plated. Made with bottom or back connection. This illustration shows back connection. In ordering specify style of connection wanted.

Each \$1.00
Each..D.P. \$1.44
Dozen..D.P. \$16.00

No. 4 Edelmenn Pump Gauge

For use on Power Pumps. This is a Special Gauge for use in hose-line. Used largely by manufacturers of spark plug pumps.

Fits 1/4-inch air hose.

Each \$1.25
Each..D.P. \$1.55
Dozen..D.P. \$17.77



Edelmenn

No. 3 Tire Pump Gauge

Fits any make of pump. Can be used as a Tire Tester or Pump Gauge.

Each \$2.00
Each..D.P. \$2.22
Dozen..D.P. \$24.00



Edelmenn No. 6 Tire Gauge

Highly nickel plated. A combination Tire Tester and Pump Gauge. Fits all makes of pumps.

This is intended for the same use as our No. 3 Gauge, but is of a different construction.

Each \$1.75
Each..D.P. \$2.44
Dozen..D.P. \$27.77



Eclipse Tire Gauge



Can be carried in the vest pocket; length over all 2 3/4 in.; diameter 3/8 in.

Is highly nickel plated all over and comes in a leather case. Is absolutely accurate and can not be put out of order. Holds the indication until reset.

This gauge contains no springs, either of the coil type or of the Bourdon type. It is constructed on a principle which is radically different from anything ever put on the market.

Each \$1.00
Each..D.P. \$1.66 Dozen..D.P. \$17.77

We offer here a new Tire Gauge of the type which is in demand. This gauge, as will be seen from the illustration, is small, compact and very neat appearing.

Reliable Watch Gauge

No. 40 Reliable Watch Gauge. Guaranteed correct within two per cent. Indicator hand remains at maximum pressure while you reset it. Nickel plated.

Each \$1.00
Each..D.P. \$1.66
Dozen..D.P. \$17.77



Full Size

Invincible Tire Pressure Gauge

The Invincible Tire Pressure Tester is an excellent sample of high grade mechanical work, made substantially like any high grade pressure gauge and the best material is used in its construction. It is practically indestructible and will last a natural lifetime.

Each \$2.00
Each..D.P. \$2.44
Dozen..D.P. \$26.66



Schrader Gauge



This is the most convenient pressure gauge ever offered to the trade. It can be carried in the vest pocket. To use it, the valve cap is removed, the gauge pressed down on the valve, and the pressure in the tire is instantly indicated.

Each \$1.00
Each..D.P. \$1.66 Dozen..D.P. \$18.66

Twichell Air Gauge



The Twitchell can be used no matter what the position of the tire valve—no turning the wheel until valve is at bottom, as with other gauges; the positively locking ratchet does away with this nuisance.

The construction of the Twitchell is so simple and the materials used of such quality that there is nothing to wear out. This gauge is absolutely guaranteed by the manufacturers, the original patentees of the Pencil Type Gauges.

Each \$1.00
Each..D.P. \$1.66 Dozen..D.P. \$18.66



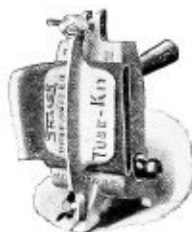
VULCANIZERS

Shaler Motorists' Vulcanizers

Portable Models.

Tube-Kit

For Tubes



The Tube-Kit, which is intended to be carried in the tool box of a car for emergency repairs, mends all tube injuries quickly and permanently. It is as simple and easy to use as an unsatisfactory temporary patch. This model is all that is needed if one does not want to take care of casings.

The correct amount of heat is produced by a lamp which burns gasoline or alcohol without smoke, soot or dangerous exposed flame. The fuel is contained in the lamp in such a way that accidental tipping over of the vulcanizer while in use would not cause trouble. A measure, graduated to give proper fuel charge to cure every repair exactly right, is furnished with the vulcanizer so that no watching or regulating is necessary. The largest tube can be mended without pinching the edges. Vulcanizing surface 30 square inches. The handle is detachable and the unit is packed in a small strong box for carrying with car. Complete with repair material. Nickel plated.

Type F No. 31 Shaler Tube-Kit, Weight 4 pounds, each.....\$2.00
Each...D.P. \$2.77

Safety Vul-Kit

Complete for Casings and Tubes



Besides making every practicable kind of tube repairs, the Safety Vul-Kit has a 3x4-inch surface curved to fit any sized tire for mending casing injuries. This is very valuable, because while tubes are only mended when the tire goes flat, casings always need attention. Small cuts neglected, quickly become blow-outs. It is easy to mend a small cut while tire is on wheel. Simply fill cut with rubber, clamp on the vulcanizer and in a few minutes you have a permanent repair. Casings cost several times as much as tubes. When a casing blows out it ruins the tube too. An ounce of prevention is worth a pound of cure. As this vulcanizer produces no exposed flame, it can be used close under a fender without scorching the paint. The lamp, which burns either gasoline or alcohol, contains the fuel in such a way that it is impossible to spill blazing liquid even if the vulcanizer were accidentally upset. The fuel supply is limited to that required for perfect vulcanization. You can't overcure or undercure a repair. Tube repairs are cured on an asbestos inlaid plate, 31



inches in diameter, which is swivelled so that uniform pressure is automatically applied to all parts of the repair. The Vul-Kit is nickel and polished, packed with repair material in strong box for carrying in tool box of car. Weight, 5 pounds.

Type G No. 32 Safety Vul-Kit.....\$3.50
Each...D.P. \$5.00

Steam Heated Model



Type S or J—
Repairing Inner Tube

tube and casing work. Government tested heat gauge, cement, Para rubber, alcohol container and illustrated instruction book. Can be carried with car.

Unlike cheap vulcanizers designed for superficial repairs, it maintains the vulcanizing temperature automatically as long as desired so that a deep casing repair requiring a long cure can be made as perfectly as a thin tube repair, requiring only a few minutes. This is done automatically by a thermostatic damper which regulates the intensity of the alcohol flame. This damper and the Safety Valve, which is an additional precaution against overheating, make the Shaler the only reliable portable steam vulcanizer. Vulcanizer heats while you prepare a repair and needs no watching or regulating while on the tire. The patented handle saves time when making several repairs in succession by allowing the hot vulcanizer to be moved from one repair to another. Flat side of heater mends all sized tube injuries on a metal shelf inlaid with asbestos to retain the heat and prevent pinching the tube. The opposite side is concave to fit on any sized casing while on rim. Vulcanizing surface 3x5 inches. Larger repairs made by resetting vulcanizer. Furnished with clamps for



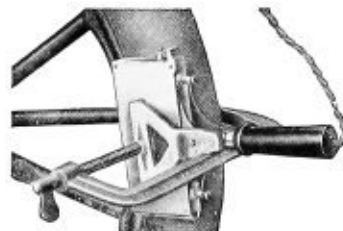
Repairing Casing
While on Wheel

Type S No. 22 Steam Vulcanizer, Polished Nickel, Weight 13 pounds, each.....\$12.50
Each...D.P. \$20.84

Type J No. 11 Stitch-in-Time, Nickel, Weight 11 pounds, each.....10.00
Each...D.P. \$16.00

Identical in operation with Type S, except that, containing no steam, the fine and safety valve are omitted. Has same thermostatic control, equipment, etc. Guaranteed to work perfectly.

Electric Heated Model

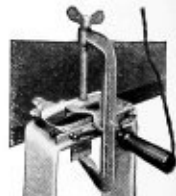


Type D—Repairing Rim Cut

distributes the heat equally to every part of the repair. Flat face of heater used in combination with an asbestos inlaid shelf vulcanizes two tubes as quickly as one—punctures or blow-outs. Connects in place of any incandescent lamp. Cost of operation about 1¢ per hour. Heats as quickly as you can get a repair ready. Packed in wooden case with complete outfit—ten-foot conducting cord, repair material, Government tested thermometer and illustrated instruction book.

Type D No. 83, A, C, or D, C., Polished Nickel, Weight 13 pounds, each.....\$12.50
Each...D.P. \$20.84

When ordering state voltage of your current and whether A. C. or D. C.



Repairing Tube



VULCANIZERS

Shaler Public Garage Vulcanizers

Steam and Electric Heated

Steam Garage Plant

Covers all requirements of a garage or repair shop. Handles every practicable sort of tube and casing repairs. Machined surface of the tube plate, $4\frac{1}{2} \times 30$ ", vulcanizes six tubes as quickly as one. Can be heated independently of casing attachment. Swivelled clamps insure even pressure to all parts of any tube repair. All sizes of casings repaired by approved wrapped tread method as used by tire manufacturers and others. Simply build up a re-enforcement of fabric inside the casing, and fill the hole with Para gum (it is unnecessary to cut away a lot of expensive rubber and fabric). The inside casing mandrel, 14" long, then applies heat directly against the fabric; the outside casing form heats from the outside. A wrapping of tape and the Shaler clamping device force new and old material into contact under enormous pressure. No air bags are necessary. The resulting repair becomes the strongest part of the tire. In order to fail, the re-enforcement would have to be torn loose and blown through the original hole, practically an impossibility.

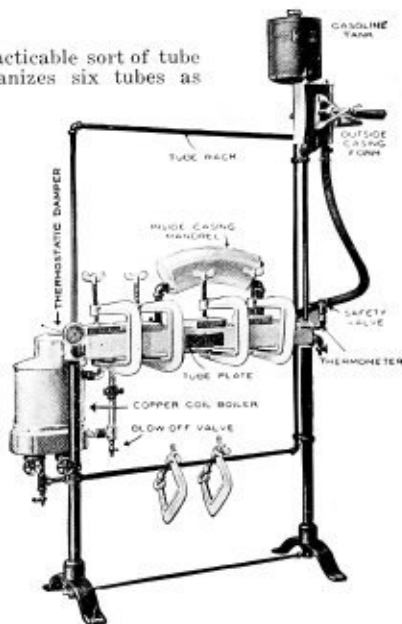
No attention is necessary after lighting burner. The boiler, a copper coil, raises steam in about twenty minutes and holds it at the right pressure indefinitely. Steam gauge and thermometer serve as a check on the operation by indicating both pressure and temperature. Safety valve eliminates danger of explosion.

When ordering, specify whether gas or gasoline burner is desired. The latter will be furnished unless otherwise specified.

Type NPR No. 41—Complete Garage Outfit as shown.....\$60.00
Each..D.P. \$100.00

(Includes 6 clamps and blocks for tube work, bead strips for rim cuts, casing clamps, tape for wrapping treads, thermometer, steam gauge and safety valve.)

Type N No. 41—Same as above, but equipped for tube work only..\$35.00
Each..D.P. \$58.34



Electric Heated Equipment

The following models constitute a complete garage equipment of the same capacity as the Steam Plant described on the next page. They have the advantage of portability, can be purchased as separate units and can be heated and used independently. It costs less to run Models B, C and E all at once than to run one electric flatiron. No special wiring required. Attach to any lighting socket. State voltage of current when ordering.

Service Model



Type B
Repairing Tube

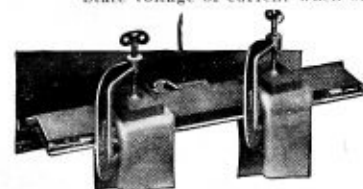


Repairing Two Tubes

Type B mends two tubes at once. Equipment consists of twenty-foot conducting cord, thermometer, clamps, and small supply of repair material.

Type B, No. 51, Polished Nickel for A. C. or D. C., weight 21 lbs.,.....\$20.00
Each..D.P. \$33.34

State voltage of current when ordering.



Heater in same size and shape as Type D. The difference is in the temperature control, which for protection against constant and severe garage service is placed on the work bench instead of in the heater. Regulation is by a rheostat, allowing only enough current to pass to produce the right temperature as shown by a thermometer in heater. This control is absolutely reliable.

In addition to the surface for mending rim cuts and small tread cuts, there is also a detachable plate for large repairs as when Type B is used in connection with Type C (shown at the right).



Regular and Rim Plate



Special Tread Plate



Type B
Repairing Tread Cut

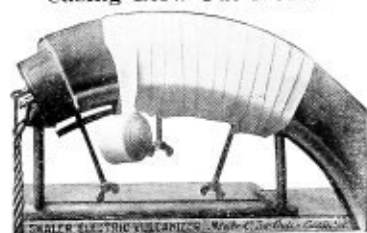
"Gang" or Multi-Tube Model

$4\frac{1}{2} \times 24$ " surface mends six tubes at once or a two-foot slit at one setting. Attaches to edge of work bench. Furnished with four patent clamps and blocks for different sized repairs, cord and plug, and two thermometers. Cost of operation about 2c per hour.

Type E No. 91—Thermostat Control for A. C. only, weight 40 lbs....\$25.00
Each..D.P. \$41.66

Type E No. 92—Rheostat Control for A. C. or D. C., weight 49 lbs....\$30.00
Each..D.P. \$50.00

Casing Blow-Out Model



In Operation

Fourteen inches long. Used with Type B for making every practicable blow-out repair by wrapped tread method described above. Fits any size tire. Cost of operation about 12c per hour. Complete with all equipment.

Type C No. 71—Thermostat Control A. C. only, weight 18 lbs.,.....\$20.00
Each..D.P. \$33.34

Type C No. 72—Rheostat Control, D. C. or A. C., weight 29 lbs....\$25.00
Each..D.P. \$41.66



Not in Operation



VULCANIZERS

Adamson Universal Vulcanizer Model "U"

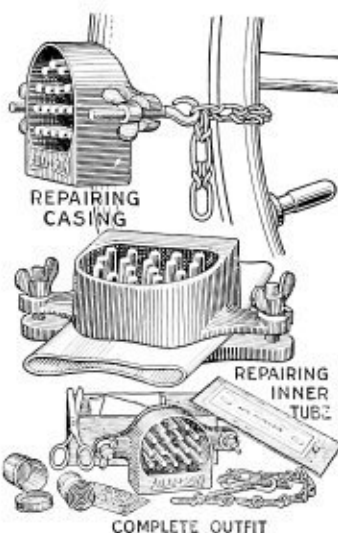
For tubes and casings.

Tire cuts ruin casings. They admit moisture to the carcass and cause the fabric to rot and weaken, grow larger—end in blow-outs. You can vulcanize your casings and tubes anywhere in 15 minutes at a cost of one cent.

Quick and reliable. Absolutely automatic. Place the patch—attach the Vulcanizer, put in gasoline—light it. No further attention required. It can't burn, scorch or injure tube or casings. It can't fail to do its work. So simple anyone can operate it.

A practical vulcanizing outfit complete with repair gum ready for instant use.

Model "U," mailing weight 4 lbs.\$3.00
Each..D.P. \$5.00 Dozen..D.P. \$56.00



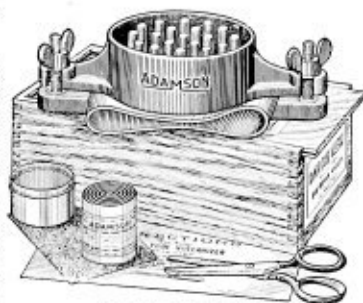
Adamson Tube Vulcanizer Model "T"

For Inner Tubes only.

A perfectly vulcanized repair in 15 minutes anywhere, on road or at home, for less than one cent.

It's quick. No cement or acid is used; the repair gum is placed on the tube according to directions. The Vulcanizer is applied by simply clamping it centrally over the repair gum and tube as illustrated. To vulcanize the repair, one ounce of gasoline is placed into the vulcanizer and ignited.

Model "T," mailing weight 4 lbs.\$2.00
Each..D.P. \$3.34 Dozen..D.P. \$37.34



Patented April 1, 1913
A Complete Outfit with Repair Gum, Ready for Instant Use

Adamson Stationary Vulcanizer Model "S"

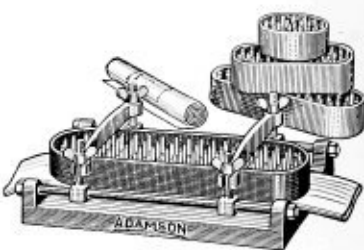
For private garages and repair shops. The most profitable investment a repairman can make.

This outfit is especially designed for repairing inner tubes. It is entirely automatic. Requires no attention. Anyone can operate it. No steam—no electricity. The most practical and most convenient vulcanizer made.

With this Vulcanizer a cut 12 inches in length is repaired in 15 to 20 minutes. You positively can not injure tubes as with other vulcanizers. The patch is prepared in the usual manner common to repair shops and the proper size cup is clamped directly over the repair. The bottom faces of the cups are polished and slightly concave; this prevents the gum from flowing and produces a perfect patch.

To vulcanize the repair, the proper amount of gasoline is placed into the Vulcanizer and ignited; no further attention is required.

Model "S," complete with $\frac{1}{2}$ lb. repair gum, shipping weight 30 lbs.\$12.00
Each..D.P. \$18.66



Patented April 1, 1913

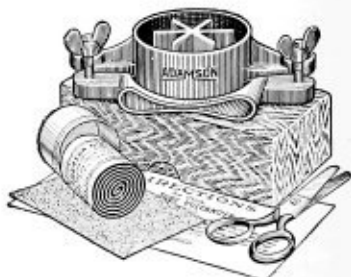
Adamson "Ford Special" Vulcanizer Model "M"

Especially adapted for repairing motorcycle, bicycle, Ford and cyclecar tubes.

A perfectly vulcanized repair in 15 minutes, anywhere, on road or at home, for less than one cent.

It's quick. No cement or acid is used, the repair gum is placed on the tube according to directions. The Vulcanizer is applied by simply clamping it centrally over the repair gum and tube as illustrated. To vulcanize the repair, one ounce of gasoline is placed into the Vulcanizer and ignited.

Model "M," mailing weight 2 lbs.\$1.50
Each..D.P. \$2.48 Dozen..D.P. \$28.00

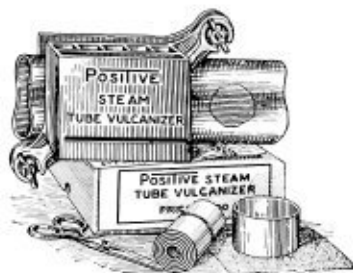


Patented April 1, 1913
A Patented Outfit with Repair Gum, Ready for Instant Use



VULCANIZERS

Portable Vulcanizers



Positive No. 140

It is so simple that a child can operate it successfully and is so handy that a car owner will repair his own inner tubes that would otherwise be neglected. This is one of the finest and best Tube Vulcanizers made. It could not be made better at twice the price.

Packed in a neat box with complete vulcanizing outfit, consisting of measuring cup, screw, sandpaper, directions and enough tube repair stock to do \$5.00 worth of repair work. Weight, each, 3 lbs.

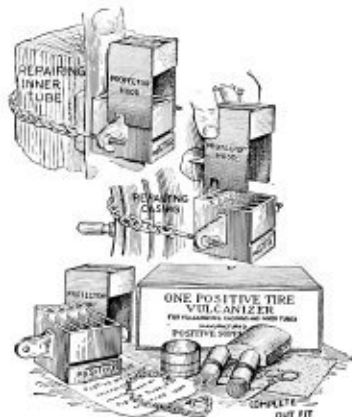
No. 140 Positive Steam Tube Vulcanizer, each..... \$1.50
Each..D.P. \$2.22

No. 142 Positive Steam Combination Vulcanizer repairs both casings and tubes; is a complete steam vulcanizing plant, put up in a small box so it can be carried in the tool kit of every car. Vulcanizes by steam, not under pressure, so cannot explode. Safe, sure—needs no attention. Repairs blow-outs, stone bruises, glass cuts and punctures in any sized casing or inner tube as perfectly as a large steam plant. Uses the same scientific method of vulcanizing by steam that all tire manufacturers use. Cannot burn, undercure, nor overcure.

The Positive consists of a metal body with a compartment for water and a compartment for fuel. The water compartment is between the tire and the flame, where it equalizes the heat generated and vulcanizes a patch that actually becomes a part of the tire. It is absolutely automatic and extinguishes itself after the work is completed. Is clean, highly nickel plated and will last forever. Can be used any place, along the roadside or in the garage. The tire need not be removed from the wheel, nor deflated, to repair casings. Put repair rubber in damaged plate and clamp on Vulcanizer. A measure of water, a measure of gasoline; light it. In twenty minutes your tire is repaired perfectly at a cost of one cent. Repairs a damage seven square inches in size with one setting and larger ones by resetting.

Furnished free with each Positive Vulcanizer, a Complete Vulcanizing Outfit, including a measuring cup, steel protector hood, special wood block for repairing tubes, scissors for cutting the rubber, directions, and enough tube and casing repair rubber to do \$10.00 worth of repair work. Weight, each, 4 lbs.

No. 142 Positive Combination Steam Vulcanizer, each..... \$3.50
Each..D.P. \$5.55



Positive No. 142

Horsey Inner Tube Pony Vulcanizer



Horsey Pony Vulcanizer

8 x 10-inch board protected with galvanized iron.

It is the safest, the most complete, the most practical, the most perfect and the best value of any small vulcanizer sold.

Will repair 90 per cent. of punctures and blow-outs.

It is built on scientific principles, and is indispensable to automobile owners and garages.

Horsey Pony Vulcanizer is packed in a substantial box with one box containing 12 assorted (large and small)

Horsey No-Cement Patches, sandpaper and instruction sheet, all complete, each..... \$3.00
Each..D.P. \$5.00

The Horsey Pony Vulcanizer is specially made and constructed to demonstrate that No-Cement Tube Patches can be vulcanized after applying according to directions without the use of any cement.

Is built on the principle of large vulcanizers.

Is the only small vulcanizer that has a spring tension on tube during vulcanizing.

Is the only small vulcanizer that can be handled without danger of burning your hands and the tube.

Is the only vulcanizer that is heated with denatured alcohol, giving a steady uniform heat without flaring up, and is safe and not dangerous like gasoline. Denatured alcohol is sold everywhere.

Vulcanizer is 5 x 6 inches and all parts nickel plated, and is mounted on



STANWELD RIMS

Quick-Detachable Demountable Types

Stanweld Rim No. 40 is probably the best-known rim in the market today. The No. 40 has both the detaching and demounting features—operating independently. It is a universal rim—accepting either straight side or clincher tires. It has a solid base—excluding dirt and moisture. It has a self-centering rim-base which prevents tire-wobbling—a cause of much tire trouble and tire wear. The clamping devices operate automatically and need not be removed from the rim. There are no unnecessary loose parts to this rim.

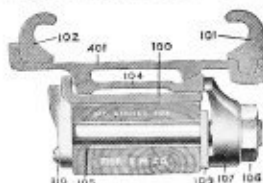
Stanweld Rim No. 40 is very moderately priced. There is no other rim on the market today that has so many good qualities and advantages.

For those who do not care for a universal rim, there are two other models of the No. 40—the No. 41, for straight side tires only, and the No. 42 for clincher tires only.

Price List of Stanweld Rims Nos. 40, 41 and 42

Size	Price per Set	Price Extra Spare
32-34-36x3½	\$24.50	\$3.40
32-34-36x4	25.00	3.50
38-40x4	28.35	4.15
32-34-36x4½ and 5	30.60	4.50
42-44x4½ and 5	37.50	5.75
38-40-42x5½ and 6	48.75	7.50

Price List of Parts of Stanweld Rims Nos. 40, 41 and 42



Cross-Section of Stanweld Rim No. 40—Accepts Straight Side or Clincher Tires

Size	Rim Base Only With- out Side Rings Model 40, Price, Each.	Rim Base Only With- out Side Rings Models 41 and 42, Price, Each.	Felloe Band, Any Model, Price, Each.	Adjusting Ring, Any Model, Price, Each.	Endless Side Ring Used on Model 40 Only, Price, Each.	Locking Ring Used on All Models, Price, Each.
32-34-36x3½	\$2.90	\$3.10	\$1.10	\$.90	\$1.00	\$1.50
32-34-36x4	3.00	3.50	1.10	.90	1.00	1.50
38-40x4	3.65	4.15	1.15	.95	1.00	1.50
32-34-36-38x4½ and 5	4.00	4.50	1.30	1.05	1.00	1.50
40-42x4½ and 5	5.10	5.75	1.45	1.20	1.30	1.80
38-40-42x5½ and 6	6.85	7.50	2.15	1.75	1.30	1.80

Bolt, complete, assembled with clamp and clamp washer, any size, price, each	\$0.25
Clamp only, assembled with nut and spring, any size, price, each	.15
Clamp washer only, any size, price, each	.05
Brace only, price, each	1.00

Quick Detachable Types

Detachable rims are made to shrink permanently on the wheel. They have removable side rings, which permit of quick and easy access to the tube, and also facilitate the removal of the casing.



Cross-Section of Stanweld Rim No. 50—Accepts Straight Side and Clincher Tires

Solid, cushion and pneumatic tires can be applied to Stanweld Detachable Rims. They are excellent equipment for electric and commercial cars.

Price List of Stanweld Rims Nos. 50, 51 and 52 and Spare Parts

Size	Price Per Set of 4 Rims.	Rim Base Model 50, Each.	Rim Base Models 51 and 52, Each.	Endless Side Ring Model 50, Each.	Locking Rings Used on All Models
28-30-32x2½ and 3	\$11.00	\$2.25	\$2.75	\$1.00	\$1.50
32-34-36x3½	12.25	2.55	3.05	1.00	1.50
34-36x4	12.75	2.70	3.20	1.00	1.50
38-40x4	14.50	3.15	3.65	1.00	1.50
34-36x4½ and 5	16.70	3.70	4.20	1.00	1.50
38x4½ and 5	18.90	4.25	4.75	1.00	1.50
40-42-44x4½ and 5	20.40	4.45	5.10	1.30	1.80
38-40-42x5½ and 6	27.25	6.15	6.80	1.30	1.80

Detaching Mechanism Used on Stanweld Rims Types 50-51-52, 40-41-42



A set of Stanweld Demountable Rims, Type 40, 41 and 42, consists of four felloe-bands, five rim-bases, (with the necessary number of side rings), four adjusting rings, twenty-four bolts complete (six for each wheel) and one brace-wrench.

A set of Stanweld Detachable Rims consists of four rims only with the necessary number of side rings.

The detaching mechanism of the No. 40 and No. 50 series of Stanweld Rims can be operated with an ordinary screw-driver. A brace-wrench is furnished to operate the demounting mechanism of the No. 40 rims, although an ordinary wrench will do the work satisfactorily.

We have a working agreement with wheel-makers to apply these rims for our customers, and can probably have it done much better and cheaper than the ordinary wheel-maker can do it. However, we shall be pleased to furnish, upon request, full instructions for proper application of rims to wheels.

Other Types of Rims That We Can Furnish

Standard Universal No. 3 Demountable (Old Continental).

Stanweld No. 30 Demountable.

Stanweld No. 21 Demountable.

These three rims all have the same felloe-band, and are interchangeable thereon. Those who have experienced difficulty with the Old Continental Demountable Rim should investigate the No. 30 and No. 21 Rims, as they can be applied to the same wheels without any expense for application.

Standard Universal No. 2 Q. D. Rim.

Plain Clincher Rims (all sizes).



STANWELD RIMS

Stanweld Series Twenty

Simplicity and ease of operation are the dominating qualities of the Series Twenty, Stanweld Demountable Rims.

You will find few rims as light in weight, yet capable of performing the same functions as the Series Twenty Stanweld Rims.



Cross-Section of No. 21 Rim



No. 21 Rim Unlocked for Removal of Casing



Cross-Section of No. 22 Rim

Size	Per Set	Spares, Each
30-32 x 3 1/4	\$15.00	\$1.80
32-34-36 x 4	16.50	2.00
34-36 x 4 1/2 and 5	20.00	2.50

What a Set of Rims Consists of

A complete set of rims, of any of the types shown, consists of:

- Four (4) Felloe-bands
- Five (5) Complete rim-bases
- One (1) Brace-wrench

All bolts, wedges, and screws necessary for proper application of the rims to wheels are furnished. Wheel-work is not included in the price.

Stanweld Rim Number Sixty

The Most Remarkable and Efficient Demountable Rim Ever Made



Stanweld Rim No. 60 With the Rim-Base Partially Removed

This is the only rim on which you can replace or repair a tube without first having to separate the casing from the sides of the rim.

Every car owner should investigate this wonderful new rim. It is absolutely alone in its remarkable ability to overcome the disagreeable effects of tire trouble.

It's a light rim, and a very strong rim. And the only rim that can be easily operated no matter how tightly the casing and rim may be "frozen" together.

Let us send you literature on this, or any other rim that we sell. But don't buy any rim until you have seen a demonstration of the Number Sixty.



Cross-Section of Stanweld Demountable Rim No. 60—Clincher Tire Type—Wonderfully Simple

Price List of Stanweld No. 60 Rims—Clincher or Straight-Side Type

Size	Price Per Set	Extra Spare
32-34-36 x 4	\$32.70	\$4.60
34-36 x 4 1/2	36.90	5.40
34-36 x 5	36.90	5.40

Price List of Parts for Stanweld No. 60 Rims

Size	Rim-Base Each	Felloe Band Each	Wedge Rings Each	Side Rings Each
32-34-36 x 4	\$3.50	\$1.25	\$.70	\$1.50
34-36 x 4 1/2	4.00	1.50	.75	1.50
34-36 x 5	4.00	1.50	.75	1.50



VALVE TOOLS

"Three in One" Valve Tool



"Three in One." Made in one piece from drop forging.
 No. 1 Valve Tool, each.....\$0.25
 Per Dozen..D.P. \$4.00

"Three in One" Valve Tool



For re-cutting outside thread, tapping inside and removing valve from stem. Combined in one tool as shown.
 No. 2 Valve Tool, each.....\$0.25
 Per Dozen..D.P. \$4.00

"Four in One" Valve Tool



These tools are unquestionably superior to those offered generally to the trade. Minute comparison as to material, workmanship and finish solicited.

No. 3 Valve Tool, each.....\$0.35
 Per Dozen..D.P. \$4.44

Valve Die



A very useful tool for re-threading outside or body of Standard Valves.

Each.....\$0.75
 Per Dozen..D.P. \$10.66

Valve Base



Valve Patch for 2½-inch and 3-inch tubes, each...\$0.20
 Per Dozen..D.P. \$2.77

Valve Patch for 3½-inch and 4-inch tubes, each... .30
 Per Dozen..D.P. \$3.55

Valve Patch for 4½-inch and 5-inch tubes, each... .35
 Per Dozen..D.P. \$4.00

VALVES AND WIRE

Tire Valves and Parts



No. 777 Schrader Valves, small, for 2½ and 3-inch tires, each.....\$0.50
 Each..D.P. \$0.60 Per Dozen..D.P. \$6.40

No. 725 Schrader Valves, large, for 3½ and 5-inch tires, each..... .60
 Each..D.P. \$0.66 Per Dozen..D.P. \$7.22

No. 792 Schrader Valves, large, for demountable tires, each..... .70
 Each..D.P. \$0.77 Per Dozen..D.P. \$8.00



Valve Caps, each..... .05
 Per Dozen..D.P. \$0.66 Per 100..D.P. \$5.33

Valve Insides, each..... .05
 Per Dozen..D.P. \$0.80 Per 100..D.P. \$5.77

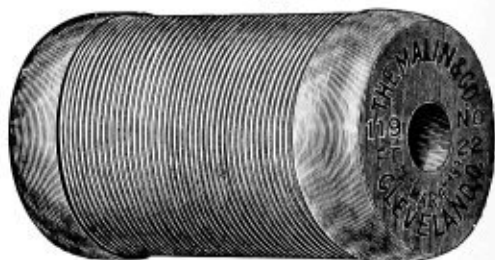


Dust Cap for Valves 725 and 777 when supplied with bushing, each..... .10
 Per Dozen..D.P. \$1.60



Bushing No. 819 for Valve No. 777 to make fit dust cap, each..... .10
 Per Dozen..D.P. \$0.60

Brass and Copper Wire



Copper Wire, 17, 20, 22 or 24 gauge, ¼-lb. spool, price.....\$0.30
 Per Dozen..D.P. \$4.00

Brass Wire, 17, 20, 22 or 24 gauge, ¼-lb. spool, price..... .30
 Per Dozen..D.P. \$4.00



PUMP ACCESSORIES

Pump Leathers



The size of a cup means the outside diameter of the cylinder for which the cup is intended. For instance, our 1-inch cup fits a cylinder which is one inch outside diameter. Remember this when ordering.

Pump Leathers, 1-inch, each	.....\$0.02
Per Dozen, D.P. \$0.27	Per 100, D.P. \$1.11
Pump Leathers, 1 1/2-inch, each	......02
Per Dozen, D.P. \$0.27	Per 100, D.P. \$1.11
Pump Leathers, 2-inch, each	......02
Per Dozen, D.P. \$0.27	Per 100, D.P. \$1.32
Pump Leathers, 2 1/2-inch, each	......02
Per Dozen, D.P. \$0.33	Per 100, D.P. \$1.44
Pump Leathers, 3-inch, each	......03
Per Dozen, D.P. \$0.44	Per 100, D.P. \$2.44
Pump Leathers, 3 1/2-inch, each	......05
Per Dozen, D.P. \$0.88	Per 100, D.P. \$5.55
Pump Leathers, 4-inch, each	......05
Per Dozen, D.P. \$0.88	Per 100, D.P. \$5.55
Pump Leathers, 5-inch, each	......10
Per Dozen, D.P. \$1.60	Per 100, D.P. \$11.11
Pump Leathers, 6-inch, each	......15
Per Dozen, D.P. \$2.22	Per 100, D.P. \$17.77

Pump Leathers in Sets

Leather Packing Sets for the leading makes of auto pumps. What they fit—

No. 1 Set fits the Stapley Pump, per set	.....\$0.15
Per Set, D.P. \$0.15	Per Dozen Sets, D.P. \$1.66
No. 2 Set fits the Brown Impulse Pump, per set	......25
Per Set, D.P. \$0.27	Per Dozen Sets, D.P. \$1.88
No. 3 Set fits the Imperial Wixom Pump, per set	......15
Per Set, D.P. \$0.15	Per Dozen Sets, D.P. \$1.66
No. 4 Set fits the Acolus Pump, per set	......15
Per Set, D.P. \$0.15	Per Dozen Sets, D.P. \$1.66
No. 5 Set fits the Nos. 99 and 50 Pumps, per set	......35
Per Set, D.P. \$0.44	Per Dozen Sets, D.P. \$5.00
No. 6 Set fits the Kellogg Pump, per set	......15
Per Set, D.P. \$0.15	Per Dozen Sets, D.P. \$1.66
No. 7 Set fits the Rex Pump, per set	......15
Per Set, D.P. \$0.15	Per Dozen Sets, D.P. \$1.66
No. 8 Set fits the Skinner Pump, per set	......15
Per Set, D.P. \$0.15	Per Dozen Sets, D.P. \$1.66
No. 13 Set fits the Kellogg Power Pump, per set	......35
Per Set, D.P. \$0.44	Per Dozen Sets, D.P. \$5.00
No. 16 Set fits the Stapley Pumps (new model), per set	......15
Per Set, D.P. \$0.15	Per Dozen Sets, D.P. \$1.66

Pump Tubing



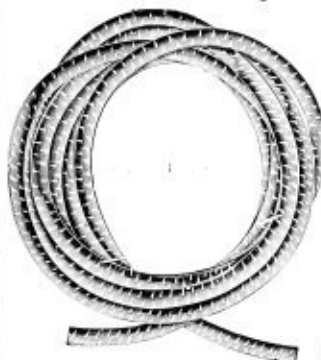
No. 10 Pump Tubing, 3/16 3 ply, per foot	.....\$0.12
Per Ft., D.P. \$0.13	Per Ft., in 50-ft. lengths, D.P. \$0.11
No. 30 Pump Tubing, 1 1/2 ply, per foot	......16
Per Ft., D.P. \$0.17	Per Ft., in 50-ft. lengths, D.P. \$0.154
No. 30 Pump Tubing, 1 1/2 ply, extra quality for high pressure, per foot	......20
Per Ft., D.P. \$0.22	Per Ft., in 50-ft. lengths, D.P. \$0.20

Armored High Pressure Tubing



No. 40 Pump Tubing, 1-inch, 5 ply, 1-inch outside diameter, armored or wire wrapped, in 25-foot lengths only, for garage use, per foot	.....\$0.25
25-ft. Lengths, each, D.P. \$6.11	
No. 50 Pump Tubing, 1-inch, 5 ply, 1 1/2-inch outside diameter, extra quality, armored or wire wrapped, in 25-foot lengths only, for garage use, per foot	......35
25-ft. Lengths, each, D.P. \$6.66	

Pump Tubing



No. 60 Braided Cloth Covered Pump Tubing, 3/16-inch. The braided cover makes this a very serviceable article and very satisfactory under high pressure, per foot.....\$0.13

Per Ft., D.P. \$0.11

Per Ft., in 50-ft. Lengths, D.P. \$0.10

No. 70 Braided Cloth Covered Pump Tubing, 1-inch, per foot.....\$0.16

Per Ft., D.P. \$0.13

Per Ft., in 50-ft. Lengths, D.P. \$0.12

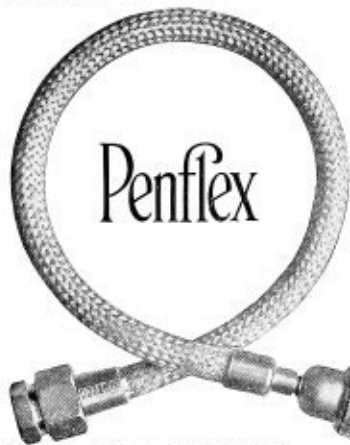
Conqueror Air Hose

The service on Air Line Hose is naturally hard. In order to meet the exacting requirements we recommend the Conqueror Brand, which is the best that can be made. The tube and cover are made from the highest grade materials known to the rubber trade and the plies of fabric are practically inseparable. In a word, the hose is of such high grade that it will withstand not only exposure and hard service, but will show excellent lasting qualities even when abused. It is guaranteed to stand 700 pounds pressure. To those who had trouble with air line hose—and there are many—this hose, which is made on the principle of "Not How Cheap, But How Good," will solve the problem.



Conqueror Air Hose, 1-inch, per foot.....\$0.25
Per Foot, D.P. \$0.40

Flexible Steel Automobile Tire Filling Air Hose



Made in 5/16-inch (inside diameter) galvanized steel, covered with a fine wire lacing. Very flexible and positively will not kink. It is not susceptible to oil usually found on a garage floor, therefore the life is far greater than rubber hose.

Stand a pressure up to 150 pounds.

Fitted with standard pipe thread coupling and acorn connections.

Flexible Steel Pump Tubing, in 12 1/2 and 25-ft. lengths.

12 1/2-ft. Lengths, ea., D.P. \$10.00 (Including connection.)

25-ft. Lengths, each, D.P. \$17.76 (Including connection.)

Hose Bands

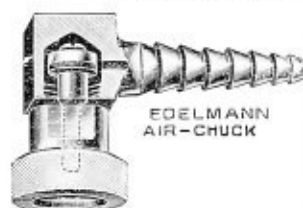
Esco Hose Bands, No. 1, 2; price, each	.....\$0.05
Esco Hose Bands, No. 2, 7/16; price, each	......05
Esco Hose Bands, No. 3, 1; price, each	......05
Dozen, D.P. \$0.44	





PUMP ACCESSORIES

Automatic Air Chuck No. 47



EOELMANN
AIR-CHUCK

This air chuck has been proven to be the ideal connection at the end of storage tank hose line. It fills the long-felt demand for an automatic shut-off coupling. It will pay for itself quickly in time and air saved.

To operate, attach the air chuck to the hose line and apply to tire. The plunger will then open and permit the air to flow freely. When removed, the air chuck automatically closes, preventing the air from escaping and eliminates the necessity of running back and forth to close a valve.

Each \$1.00
Each..D.P. \$1.66 Dozen..D.P. \$17.77

No. 46 Pump Connection

No. 46 Pump Connection is a heavy, substantial connection for air hose.

Each \$0.25
Each..D.P. \$0.33
Dozen..D.P. \$3.55



N2.46

No. 52 Pump Connection



No. 52

A perfect slip-on connection that stays on. This connection is designed so that when it is applied to the tire, a quarter turn locks it on the threads of the tire valve and it cannot come off until released. Made extra heavy, of brass, for hard service.

Each \$0.30
Each..D.P. \$0.44 Dozen..D.P. \$4.88

No. 45 Pump Connection

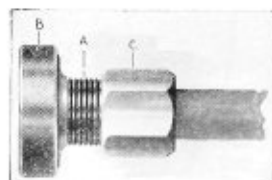
No. 45 Screw Connection for air pumps. Made entirely of brass. A good, serviceable connection with fiber washer.

Each \$0.15
Each..D.P. \$0.13
Dozen..D.P. \$1.33



No. 45

Pitner Pump Connection



The Pitner Hose Connection is the hose connection about which it can truthfully be stated, "Fills every requirement of a hose connection."

Each \$0.35
Each..D.P. \$0.33
Dozen..D.P. \$3.55

Acorn Connection



The Acorn Connection will fit any valve, as a perfectly air-tight connection is made instantly by simply pushing it over the valve. It will pull off as easily. Absolutely air-tight, quick, and will last for months before rubber washer needs replacing, which can be done in a few moments.

Each \$0.15
Each..D.P. \$0.18 Dozen..D.P. \$2.00

Genuine "Eclair" Connection

Same type as Acorn but of better quality.

Each \$0.30
Each..D.P. \$0.40 Dozen..D.P. \$4.44



Acorn No. 3

No. 3 Acorn Connection same as regular Acorn with center pin to open valve spring and right angle stem to fit 1/4-inch hose.

Each \$0.25
Each..D.P. \$0.27
Dozen..D.P. \$3.00



Acorn B

No. B Acorn Air Cock. Regular Acorn head with right angle shut-off stem. Has screw in top which may be removed and gauge with 1/2 pipe thread may take its place.

Each \$0.75
Each..D.P. \$0.88 Dozen..D.P. \$9.33

Acorn Washers

Rubber Washer for Acorn and similar connections.

Each \$0.05
Box of 25..D.P. \$0.66
Dozen..D.P. \$0.50



Keno Connection



No. 3 Keno Connection has a long stem and extra screw to hold the valve open when pumping.

Each \$0.20
Each..D.P. \$0.40
Dozen..D.P. \$4.00

No. 4 Keno Connection has a long stem and extra screw and fits outside Schrader valve.

Each \$0.25
Each..D.P. \$0.40
Dozen..D.P. \$4.00



PUMP ACCESSORIES

The Romort Automatic Air Valve

Style "A"



The Romort Automatic Air Valve, Style "A," is the most popular valve in use for heavy work. Solid bronze, practically indestructible. Made to fit any size tubing. All parts, with exception of the rubber gasket, guaranteed to wear one year without repair or replacement. Instantaneous in opening and closing; positively air tight. Impossible for users to waste air. Weight, 9 ounces.

Price, each\$3.00
Each..D.P. \$5.00 Dozen..D.P. \$53.33

The Romort Automatic Air Valve

Style "B"



The Romort Automatic Air Valve, Style "B," is a high grade air valve made to meet the popular demand for a light and inexpensive automatic air device. Solid bronze, one piece casting, taper screw stem; will fit any size tubing. Automatic in opening and closing. Guaranteed air tight. Highly recommended for public service stations, vulcanizers and repair shops. Weight, 5 ounces.

Price, each\$1.00
Each..D.P. \$1.66 Dozen..D.P. \$17.76

Romort Angle Pump Connection

Not Automatic

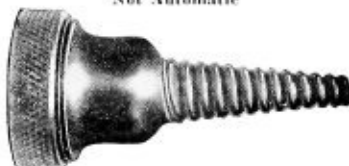


Extra heavy solid bronze one piece casting, made for direct connected air compressors of all types. Especially convenient for power tire and spark plug pumps attached to automobiles. The very best for vulcanizing and tube repair shops where automatic air connections are not required. Has threaded taper stem to fit tubing from $\frac{1}{2}$ to $\frac{3}{4}$ inch. Equipped with Romort design rubber washer. With exception of the rubber gasket guaranteed for one year.

Price, each\$0.40
Each..D.P. \$0.66 Dozen..D.P. \$6.11

Romort Straight Pump Connection

Not Automatic



Solid bronze one-piece casting, will stand severe abuse. Made for use on direct connected air pumps, hand and foot pumps. Replaces the awkward and inconvenient screw connection. Has threaded taper stem to fit tubing from $\frac{1}{2}$ to $\frac{3}{4}$ inch. When connected to tire valve it will not leak or blow off. Equipped with Romort design rubber washer. With exception of the rubber gasket guaranteed for one year.

Price, each\$0.25
Each..D.P. \$0.42 Dozen..D.P. \$4.66

Romort Special Pump Connection Rubber



Made extra heavy of a special compound. Easily slips on and off the tire valve. Will hold firm against high or low air pressure, and positively will not blow off or turn inside out. Made especially for the Romort valves and will also fit all other pump connections. See that "Romort" is stamped on the rubber.

Price, each\$0.05
Dozen..D.P. \$0.66

Romort Air Nozzle (Cushion Cleaner)

For Romort Valves and Pump Connections



This device is designed to release the air in Romort Automatic Air Valves, Styles "A" or "B," when air is required for the purpose of blowing the dirt and dust off cushion tops, foot mats, machinery, etc. When attached the air flows out of a needle point with terrific force, forming a perfect and effective air cleaner. This nozzle may also be used on Romort Angle and Straight Pump Connections. Satisfaction guaranteed.

Price, each\$0.25
Each..D.P. \$0.42 Dozen..D.P. \$4.66

Romort Knurled Nut

A knurled nut used to connect the Romort Engine Cleaner to the Romort Automatic Valve.

Price, each\$0.10
Dozen..D.P. \$1.88



PUMPS

Springfield



Springfield Single Action Tire Pump. The barrel is of best Mandrel Drawn Brass Tubing, 27 inches long, 1 3/16 diameter, 20 gauge. Hose is of the best 5-ply rubber, guaranteed to stand 200 pounds pressure. Weight, 2 1/2 pounds.

Each \$3.50

Each...D.P. \$4.22

Dozen...D.P. \$46.66

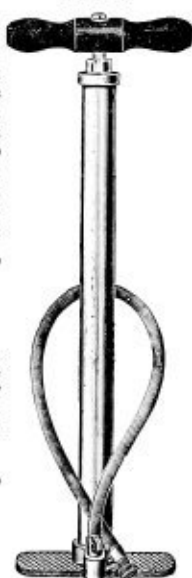
Crown Single Action Tire Pump for small size tires. Barrel made of heavy seamless brass tubing, 1 1/4-inch. Full length of pump, 20 1/2 inches.

Each \$1.50

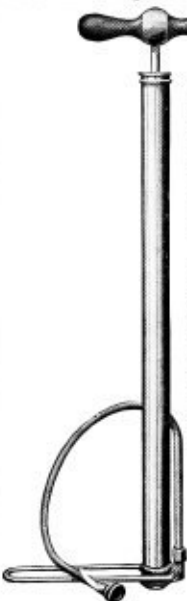
Each...D.P. \$1.88

Dozen...D.P. \$20.55

Crown



Pitner Single Action



The Pitner Single Action Pump has excellent and exclusive features that have made it famous. The unique leather piston ring produces an air-tight piston. Full length, 27 1/2 inches.

Each \$3.50

Each...D.P. \$5.55

Dozen...D.P. \$62.22

The Pitner Double Action Pump has the qualities that have popularized the Pitner brand. It produces a large volume of air and inflates a tire quickly. Full length, 23 inches.

Each \$5.00

Each...D.P. \$7.22

Doz...D.P. \$80.00

Pitner Double Action



Aeolus

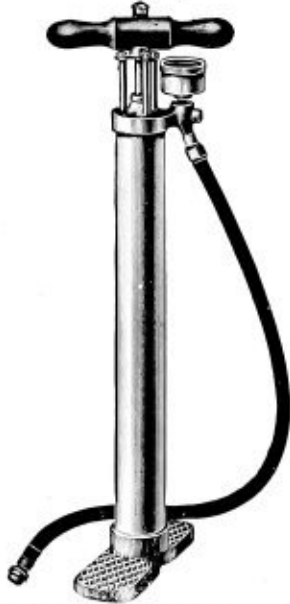


Aeolus Double Cylinder Tire Pump. Cylinders made of seamless brass tubing; absolutely non-leakable. The air intake, as well as delivery of air into tire, is at top of pump. Full length, 20 inches.

Each \$3.00

Each...D.P. \$3.10 Dozen...D.P. \$33.33

Stapley



Stapley Compound Tire Pump. Will inflate a tire to required pressure quickly. Cylinder is a seamless brass tube; the base is non-leakable.

Stapley Pump, without gauge, each \$4.00

Each...D.P. \$5.00 Dozen...D.P. \$57.33

Stapley Pump, with gauge, each 5.50

Each...D.P. \$8.10 Dozen...D.P. \$93.33

Skinner



Gibson Quality



Skinner Compound Pump is the only one that does all the work on the dome stroke. The back-breaking up-pull of other pumps is eliminated. Full length, 24 inches.

Skinner Pump, without gauge, each \$3.00

Each...D.P. \$4.44 Dozen...D.P. \$50.66

Skinner Pump, with gauge, each 5.00

Each...D.P. \$6.11 Dozen...D.P. \$70.00

No. 55 Gibson Quality Three-Barrel Pump is made of the best materials obtainable, is easy to operate and will inflate a tire in less time than other pumps. Packings are of the finest quality and will wear indefinitely. Full length, 22 inches.

Each \$5.00

Each...D.P. \$6.66 Dozen...D.P. \$73.33



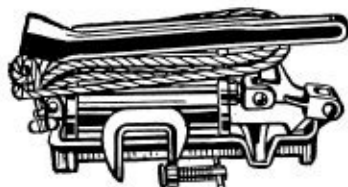
PUMPS

Yankee Folding Pump

The Yankee Folding Pump makes hand inflation of automobile tires a simple and easy matter. Built to clamp quickly to the running board of any automobile, it is worked easily, with one hand, from a natural upright comfortable position. This is in strong contrast to the position necessitated in the operation of the ordinary pump, which requires the use of both hands and feet, and all the energy of one's body.



CLAMPED TO
RUNNING BOARD



FOLDED FOR TOOL BOX

Each\$5.00
Each..D.P. \$8.33. Dozen..D.P. \$93.33

Inland Folding Pump



The Inland Hand Tire Pump will inflate any size tire to required pressure with marvelous ease and rapidity. It is quickly clamped to either running board. Power developed nine times more than by ordinary foot or hand pump and operated from an easy, natural position. No back bending, no straining, no fatigue. This pump is exceptionally well built. Frame and handle malleable; cylinder and cylinder base are brass, 3" diameter; piston stroke, 5 1/4"; all bearings are cold rolled steel; outlet valve has 1/2" "no-corrode" steel check ball, affording quick air passage; piston cup is air cooled and will never burn out; drop forged thumb screws. Handle 27" long with two hand grips for low and high tire pressure. Equipment includes eight feet of best meruco covered hose and 200 lb. pressure gauge. Very compact, easily carried in tool box; length over all, with handle folded, 15 1/2".

Each\$7.50
Each..D.P. \$11.10. Dozen..D.P. \$126.66

Jansen Tire Pump



The most practical and easily operated Hand Power Pump in existence. In every way the ideal pump for the up-to-date motorist.

The Jansen is a full-crum pump—that is, it gives and takes with every motion of the body.

You can pump against 90 lbs. pressure with it more easily than you

can pump against 65 lbs. pressure with the ordinary vertical pump—and with just about one-fourth the physical effort.

More convenient and less bother than spark plug or engine driven pumps.

And this is important, inflation is so very speedily accomplished. This feature of speed is extremely desirable, as everybody knows that has ever had tire trouble at an awkward time.

It will fit any tool box. Its cost is minimum. It will last indefinitely. A boy or a woman can learn to operate it almost as easily as a man.

Each\$5.00
Each..D.P. \$8.33. Dozen..D.P. \$93.33

Imperial Compound Pump No. 99

The large cylinder pumps into the small one and the small one pumps the compressed air into the tire or tank. The cylinders, bases and ground valves are all brass and the pump is of the very finest quality throughout. Will pump 180 lbs. pressure or more. No. 99 is fitted with the best quality hose and Keno nipple.



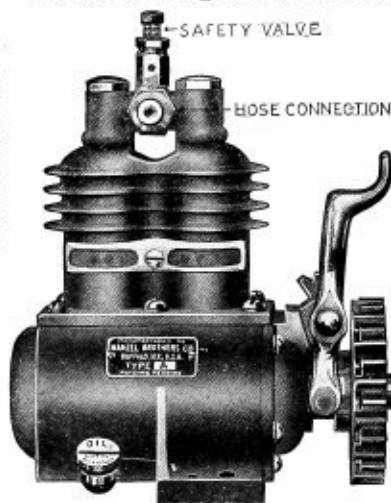
No. 99 Imperial Compound Pump, each\$10.00
Each..D.P. \$17.77

No. 99 With Gauge, each12.50
Each..D.P. \$19.44



PUMPS

The Manzel Engine-Driven Tire Pump



For more than 16 years the Manzel Bros. Co. have been producers of high grade lubricating pumps for use on the finest steam engines and high powered marine gas engines. During these years Manzel Pumps have always stood as the highest quality pumps that could be bought and in this field have always brought the highest price.

A few of the cars for which we furnish complete fittings

Abbott-Detroit 44	1912
Abbott-Detroit 34-40	1913
Abbott-Detroit 44-50	1913
Abbott-Detroit 34-40	1914
Abbott-Detroit 44-50	1914
Abbott-Detroit 50-60	1914
Abbott-Detroit F	1915
Abbott-Detroit P	1915
Abbott-Detroit L	1915
Abbott-Detroit K	1915
Buick 19	1910
Buick 27	1911
Buick 28-29	1912
Buick 34-35	1912
Buick 43	1912
Buick 21-25	1913
Buick 30-31	1913
Buick 40	1913
Buick B-24, B-25	1914
Buick B-36, B-37	1914
Buick B-35	1914
Buick C-24, C-25	1915
Buick C-36, C-37	1915
Buick C-35	1915
Cadillac	1909
Cadillac	1910
Cadillac	1911
Cadillac	1912
Cadillac	1913
Cadillac	1914
Cartercar R	1912
Cartercar 5A	1913
Cartercar 5B	1913
Cartercar 5C	1913
Cartercar 5D	1913
Cartercar 5A	1914
Cartercar 5B	1914
Cartercar 5C	1914
Cartercar 5D	1914
Cartercar 7	1914
Cartercar 9	1915
Case 35	1914
Case 40	1914
Chandler Six	1914
Chandler Six	1915
Chalmers 26	1912
Chalmers 24	1914
Chalmers 26	1915
Cole 4-40	1913
Cole 6-60	1913
Cole 10, 4-45	1914
Cole 6-60	1914
Cole 10, 4-45	1915
Cole Light Six	1915
E. M. F. 39	1912
Franklin 6	1914
Hudson 33	1912
Hudson 37	1913
Hudson 54	1913
Hudson 6-40	1914

It is the experience largely that has accrued in the manufacture of these high quality heavy duty lubricating pumps for steam and marine gas engines, that has enabled the Manzel Bros. Co. to bring out the present highly efficient, high quality two-cylinder engine-driven tire pump for use in the automobile industry—a quality pump for \$20.

A few of the cars for which we furnish complete fittings

Hudson 6-54	1914
Hudson 6-40	1915
Hudson 6-54	1915
Imperial Six	1914
Kissel Kar 4-40	1914
Kissel Kar 6-48	1914
Kissel Kar 6-60	1914
Maxwell 6-50	1914
Maxwell 25	1914
Maxwell 25	1915
Michigan 40	1913
Mitchell 4	1914
Mitchell Little Six	1914
Mitchell Big Six	1914
Oakland 40	1912
Oakland 35	1913
Oakland 42	1913
Oakland 6-60	1913
Oakland 36	1914
Oakland 6-48	1914
Oakland 6-61	1914
Oakland 6-62	1914
Oakland 37	1915
Oakland 49	1915
Oldsmobile 42	1915
Oldsmobile 6-55	1915
Overland 59	1911
Overland 61	1912
Overland 69	1913
Overland 69-TE	1913
Overland 69-FE	1913
Overland 71	1913
Overland 79	1914
Overland 80	1915
Overland 81	1915
Packard 3-48	1914
Packard 2-38	1915
Paige-Detroit 36	1913
Paige-Detroit 36	1914
Paige-Detroit 36	1915
Rambler Cross Country	1913
Rambler Cross Country	1914
Reo the Fifth	1911
Reo the Fifth	1912
Reo the Fifth	1913
Reo the Fifth	1914
Reo the Fifth	1915
Simplex 3-38	1912
Speedwell 6	1913
Speedwell 6	1914
Studebaker 4-35	1913
Studebaker 4-25	1914
Studebaker 6-40	1914
Studebaker 6-40	1915
Stutz 4	1914
Stutz 6	1914
Stutz 4	1915
Vellie 9, 4-45	1914
Vellie 10, 6-50	1914
Vellie 14, 4-45	1915
Vellie Big Six	1915

The Manzel Engine-Driven Tire Pump will inflate the largest tire in less than three minutes. It eliminates all manual labor and makes it easy to keep the tires inflated to the correct pressure. It is placed on the side of the motor right under the hood and is always ready for use. To operate it it is only necessary to couple the hose to pump and tire, throw gears into mesh, and start the engine. The tire will be pumped to any desired pressure in less time than it usually takes to locate the hand pump.

It is a two-cylinder pump and is built like an engine—all metal—with cast-iron cylinders, pistons and piston-rings, bronze connecting rods and bearings, drop-forged steel crank shaft and aluminum crank case. There are no rubber discs to replace and no leather parts to wear out. The cylinders are opposed, giving an absolutely uniform flow of air. It runs smoothly and easily and fills the tires in the quickest possible time without any strain on the driving mechanism.

All parts are accurately fitted and ground, the workmanship being equal to that of the highest priced motors. It weighs less and takes up less space than any pump of equal capacity. There is only one place to oil. It supplies only pure air to the tires. Every pump is equipped with an air filter which positively prevents any oil or dirt from getting into the tubes. Every pump is tested to two hundred and fifty pounds pressure, but is provided with a safety valve which can be set at any desired pressure.

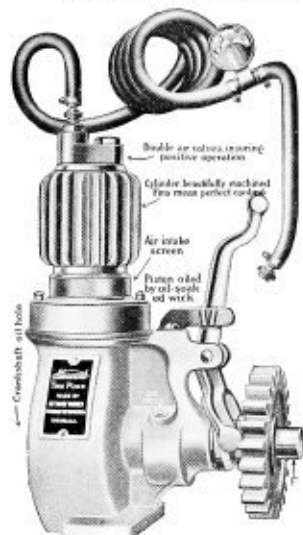
Any automobile owner can install it, as there is no machine work to be done. Brackets and necessary gears are supplied, correctly fitted for the various cars, and the installation can be made by anyone in less than one hour's time. We furnish complete fittings for installing Manzel Pumps to the cars.

PRICE, complete, including bracket, gears, fifteen feet of air hose, pressure gauge, etc., D.P. \$33.33

If interested in any models not listed herewith, write us, as this list is being increased continually.



Stewart Tire Pump



This is mounted right on the motor. Simply throw over the lever, and the pump operates instantly. Throw out the lever when tire or air-starter is sufficiently filled up.

Most of the one-cylinder models on the market are cheaply constructed, have no particular efficiency, and no provision for correct lubrication. We have taken care of all these points.

The base of the pump is aluminum. The piston is steel, hardened, ground and lapped. Connecting rod is hardened steel. Cylinder is a finely machined piece of work, air cooled, with fins (B) which insure perfect cooling.

This Stewart Pump is of remarkable performance—of sturdy construction—and light in weight.

There are no rubber nor leather packings to wear or cause leakage. Its capacity is such that it will fill a 36-inch x 4½-inch tire in less than five minutes.

The air is protected with a double ball valve (A), so that in the event that dirt should hold one of the valves open the other valve would be sure to act, and in this way cause no loss of air. All of the air pumped into the tires is screened (C).

The bore is 1½ inches; stroke, 2½ inches. The length of the piston is 1½ inches, making an extra long bearing. This is fitted with oil conductors, to insure correct lubrication.

This one-cylinder pump has been constructed for ample oil lubrication, but requires no surplus oil in the crank case.

The piston rubs against an oil-soaked wick, which supplies every bit of oil it needs, and yet prevents one particle of excess oil from getting into the cylinder. This work projects outside where oil is dropped on to it through two small oilers (DD). The crank shaft is provided with a separate oiler (see "oil-ring"), while the connecting rod is oiled at (E).

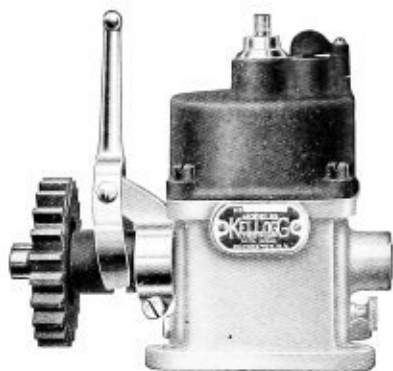
The bottom of the crank case is open, so that in case there should be the least amount of free oil it will immediately drop out. None can be carried up through the air and into the tires.

With the Pump is furnished a gear-shift, an air-pressure gauge, and 13 feet of hose with connections. Stewart Tire Pump complete with bracket and gears for immediate installation, each\$15.00 Each..D.P. \$22.22

In ordering it is necessary to state make of car, year and model number, gear which meshes with gear on motor and thereby operates pump.

PUMPS

Kellogg Tire Pump



In announcing the 1915 Kellogg Single Cylinder Engine Driven Tire Pump, particular attention is called to the new and original features which distinguish the Kellogg from the many so-called tire pumps which are in reality not tire pumps at all, but modifications of old-fashioned stationary air compressors, the much criticised diaphragm type, or those which follow in a general way the design of a gasoline motor.

Exhaustive tests and experiments have proven that both the intake and exhaust valves of a single cylinder pump must be of the poppet type, and that holes bored through the cylinder walls at the full down stroke of the piston do not permit a full charge of air to enter the cylinder. Double check valves of the type illustrated add a great deal to the cost of manufacture, but we use them. The valves are so well designed that the pump does not heat up when working against pressure, which does away with the necessity of cooling flanges and gives a much cleaner appearing pump. The intake valve is screened to prevent any dirt entering with the air.

The cylinder of the pump is of finest cylinder gray iron, ground to exact size and polished. The volume of the pump is remarkable and in actual test you will find that you can inflate your tires to proper pressure in less time with the Kellogg than with any other pump. Two and a half to three minutes' running of the motor at moderate speed will inflate the largest tire to proper pressure.

The piston is of special interest on account of its peculiar construction. Very close grained gray iron is used and piston is fitted with two carefully ground rings. The construction is such that no side strain is thrown upon the cylinder walls, which results in a perfectly true travel of the piston and great efficiency.

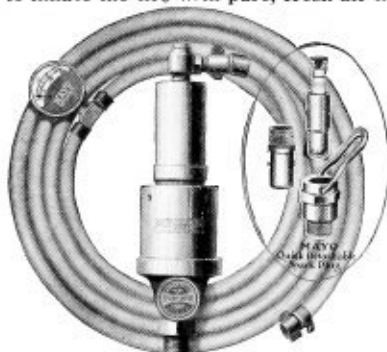
101 Kellogg Single Cylinder Pump complete with tubing, gauge and attachments, each\$15.00 Each..D.P. \$23.33



PUMPS

Mayo Spark Plug Pump

A thoroughly reliable pumping plant which can be instantly attached to all four-cycle motors of two, four or six cylinders (not operative on two-cycle motors) and be depended upon in every instance to inflate the tire with pure, fresh air in from two to four minutes, depending on size and pressure desired. Guaranteed pressure obtainable, 100 pounds and over. Can be attached to any car in a few seconds' time and cost of outfit is final. Anybody can use it with sure results.



Let the Motor Pump Your Tires

Simply remove a spark plug from any convenient cylinder and substitute the pump (with the hands only) is the advantageous method of attaching to all motors. After connecting the hose from the pump to the tire, the motor should be started and run on low throttle from two to four minutes until the tire has been inflated to the pressure desired.

Pumping tires the "spark plug way"
Makes hard work easy on the hottest day

You save 25% of Your Tire Expense Using this Outfit

This claim is corroborated by thousands of automobile owners from actual experience. The Mayo Spark Plug Pump enables you to keep your tires properly to pressure all the time so that full mileage service is obtained, to say nothing of the great convenience and labor saving advantages. The pump is noiseless in operation, non-adjustable, requiring no attention whatever other than an occasional drop of oil, and works equally well on all sized cars. Small, light, compact—weighing only 2½ pounds—which can be carried anywhere. Always in working order and ready for use. The pump is fully guaranteed for one year—built like your motor with metal rings and to last as long as your car.

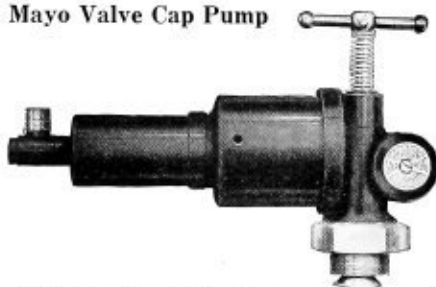
Outfit consists of pump with adapter to fit any car, 12 ft. superior hose, with connections and guaranteed accurate pressure gauge installed in the hose line ready for use.

Price \$10.00
Each...D.P. \$16.60

A MAYO QUICK DETACHABLE SPARK PLUG greatly adds to the convenience of using the pump outfit. Can be installed in your motor the same as an ordinary spark plug. A quarter turn of the lock handle permits the core of the special spark plug to be slipped out—pump slips in and is locked ready for use in the same manner. Both operations in two seconds. Furnished in ⅝-18 and ½-inch sizes (no metric) complete with connection for Mayo pump. \$1.50 extra.

Each...D.P. \$2.49

Mayo Valve Cap Pump



A "Stay on the Motor" pump always attached and ready for service. To fit your engine, remove a cap from over one of the exhaust valves and tap same 1½-24 thread. Install pump into the valve cap as per directions furnished. This pump is fully guaranteed to give satisfactory service. Furnished complete with 14 ft. of superior hose, with accurate gauge and connections and full directions for attaching.

Each \$15.00
Each...D.P. \$25.00

Before ordering examine your motor to be sure valve cap can be drilled and tapped 1½-inch. If not, consult your local machinist about making a new valve cap.

Mayo Ford Pump

A diminutive Mayo Spark Plug Pump built especially for the Ford car. A real power tire pump guaranteed to give satisfaction and inflate a tire with pure, fresh air. 32 x 3 size to 65-lb. pressure in two minutes; 32 x 3½ size to 70-lb. pressure in three minutes. Attached and used the same as the standard Mayo Spark Plug Pump. Construction is strong—metal piston rings and valves used. No wearing parts to break or get out of order—fully guaranteed for one year.



Fitted with ½-inch connection and furnished complete with 10-foot hose, accurate gauge and connections.

Each \$8.00
Each...D.P. \$13.33



PUMPS

Utility Junior Tire Inflator



Utility Junior Complete with Pneu-Meter

Absolutely automatic. Pumps only pure, fresh air into your tires. Built of rust-proof bronze, brass and nickel-plated steel. Will last a lifetime. The Pneu-Meter installed on the hose line prevents over-inflation and under-inflation. Connect your pump, set your Pneu-Meter at the right pressure, start your engine and forget it. You don't have to watch your pump—the Pneu-Meter does it for you. When your tire is properly inflated, it becomes a safety blow-off valve, using excess pressure to sound a continuous signal—so simple a woman can work it.

For tire inflation control. Specially adapted to Ford and light cars, with tires $3\frac{1}{2}$ " diameter. Pump is $2\frac{1}{2}$ " diameter, 6" high. Choice of adapters $\frac{1}{2}$ " standard or metric threads, or $\frac{3}{8}$ -18. 10-ft. braid covered tubing, tested to 1,000 lbs. Utility Junior Pump—barrel of pressed steel heavily nicked. Weight packed for mailing, three lbs.

Utility Junior Pump, complete with Pneu-Meter,
each \$9.00
Each..D.P. \$12.22 Dozen..D.P. \$133.33

Prest-O-Tire Tubes



One tube will completely fill one large tire in 20 seconds. One to six or eight tubes may be easily carried in tool box. One valve and connection fits all tubes. The tubes are handy, quick and reliable; they are hermetically sealed; no chance for leakage.

Made in two sizes. For tires over 34x4 size, use White Label Tubes.

Prest-O-Tire Tube, green label, $1\frac{1}{4}$ x12, each..... \$1.00
Each..D.P. \$1.55

Prest-O-Tire Tube, white label, $1\frac{1}{4}$ x12-inch, each.. 1.25
Each..D.P. \$1.95

Valve and Hose Connections to fit all tubes, each.. 2.00
Each..D.P. \$3.33

Recharges for both sizes20
Each..D.P. \$0.33

Brown Impulse Tire Pump

Pumps pure air. Equipped complete, 12 feet of hose, high grade gauge, self-opening valve connection and Q. D. Spark Plug.

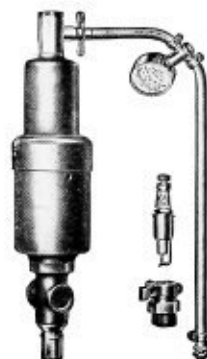
The pump operates on the compound principle, inflating the tire with absolutely pure, cool air. The action which prevents the taking in of gases is due to the breaking up of the vacuum of the motor by the special Breather Valve. This has a tension of three ounces, the ordinary motor having about 5 feet of vacuum. The atmospheric pressure of 15 pounds to the square inch immediately overcomes the vacuum and the pure air rushing into the cylinder takes the place of the gasoline vapor. In other words, there is less resistance in the Breather Valve than in taking the gases from the carburetor through the manifold into the motor.

The cylinders are made of gray iron, bored and reamed on special machines. As much care is taken with this operation as with the highest priced motor. Only one set of pistons is employed, making same fool-proof and perfectly balanced in all details.

The rings are ground and lapped to insure close fit. Breather and upper discharge valves are of polished brass with ground seats—impossible to corrode.

Finish is in special two coat gray enamel, adding greatly to appearance for the owner or car manufacturer.

The pump is adaptable to any four cycle motors.
Brown Impulse Tire Pump, each \$12.00
Each..D.P. \$20.00 Per Dozen..\$216.00



Brown Junior Tire Pump



For small cars, such as Regal, Metz, Saxon. Built like the Impulse with compound feature. Equipped with "T" and Gauge.

Each \$5.50
Each..D.P. \$9.15 Per Dozen..D.P. \$101.11

KLAXON

Klaxons are the highest-priced warning signals made

They are not made to sell at a price; nor to compete on the basis of price. Klaxon price is and always has been secondary to Klaxon Goodness and the Permanent Satisfaction of Klaxon owners. Klaxon cost is measured in years—not dollars. Klaxons are guaranteed permanently—not for one year or three years or five years. *Permanently.*



There are more than four hundred thousand Klaxons in use. The Klaxon is known everywhere. It is everywhere recognized as the Standard warning signal.

The Klaxon principle is as different from the electric "buzzer" principle as black is from white. The whole construction is different—Klaxons stand up permanently. The note is different—Klaxons carry far ahead in the country; they get instant attention and action in town.

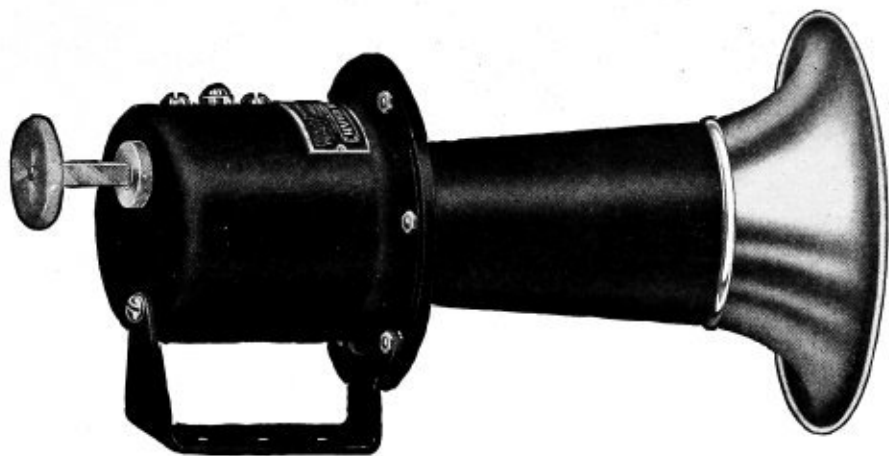
THE KLAXON NOTE

The long note—the kind you use in the country—is clear, bugle-like and of great carrying power. It is heard around bends, under culverts, over hills. The automobilist ahead hears it—above his engine and the shifting of his gears. The wagon-driver ahead hears it—above the rumble of his wagon and the clatter of his horse's hoofs. With a Klaxon it is unnecessary to slow down and wait for the vehicles ahead to turn out. Your share of the road is ready when you get there. Your trip is uninterrupted.

The short, sharp note—from a light touch of the button—is called the "tiger." In town this is enough. It is heard above the noise of traffic. It penetrates the thoughts of careless, absent-minded pedestrians. It can't go unheard. It can't be misunderstood. It's a true *warning*.

OVER

"The Public Safety Signal"



HAND KLAXONET

\$4⁰⁰

Brass projector, oval bell, loud note—a little higher in pitch than note of Hand Klaxon.

Finished in black and nickel, black and brass, and all black.

Also with short projector and special attaching brackets for motorcycles in all nickel, black and nickel, and all black.

YOU GET THE
KLAXON
PERMANENT
GUARANTEE

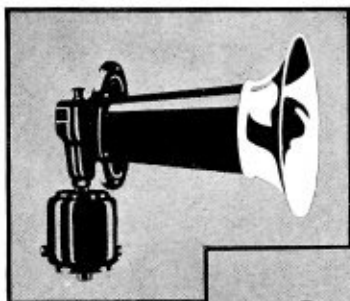
Klaxon Quality

SUBJECT TO
THE REGULAR
KLAXON
DISCOUNTS

KLAXON

The Type "L" Klaxon at Twenty Dollars

is the sensation of the year. Never before has such signal quality been sold at so low a price. No other signal even looks like it. Its exclusive "right-angle" construction distinguishes it from all other signals. The man with a type "L" Klaxon knows he has the highest grade signal possible to buy; and that everyone who sees it knows it.



Type "L"
KLAXON
\$20

1915 Prices

KLAXON
Type L (long projector) \$20.00
Type S (short projector) 20.00
Combination (with bulb-horn) 30.00
Boat Type (with swivel bracket) 22.50

KLAXONET
Type L (long projector) \$15.00
Type S (short projector) 15.00
Combination (with bulb-horn) 24.00
Boat Type (with swivel bracket) 16.50

KLAXET
Type L (long projector) 9.00
Boat Type (with swivel bracket) 10.50

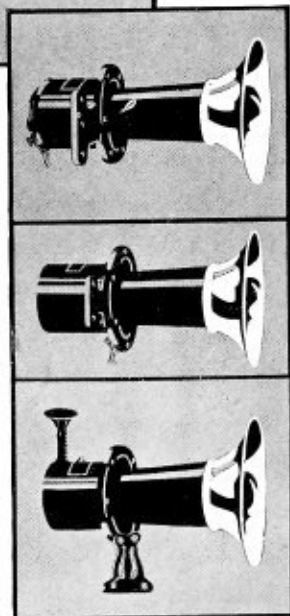
Klaxons, Klaxonets and Klaxets are supplied complete with push-button, matching finish of instrument, and ten feet of double insulated wire. They are regularly wound for 6 volts. For special voltages up to 110 inclusive, an extra charge is made. Finished in Black and Nickel; Black and Brass; all Nickel; all Brass; all Black.

HAND KLAXON
With regular bracket . . \$7.50
With special bracket for motorcycles 9.00
Boat type 9.00
Hand Klaxons are finished in Black and Nickel; Black and Brass; all Nickel; all Brass; all Black and Nickel.

Type "L"
KLAXONET
\$15.00

Type "L"
KLAXET
\$9.00

HAND
KLAXON
\$7.50



The Klaxonet and Klaxet are smaller Klaxons—operating on the same principle. And for cars like the Ford that have no batteries or electric lighting systems, there is the Hand Klaxon.

The Hand Klaxon is not intended for cars with electricity. On these it will never take the place of the larger Klaxons. The electric button is too handy. The chance to get the signal ahead and away from the driver is too much of an advantage. The electricity is there to be used. A touch of the button—the electricity does the work.

All Klaxons are guaranteed permanently

"The Public Safety Signal"

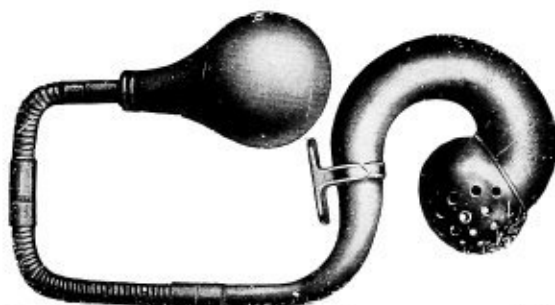


HORNS

Bulb Horns



No. 101 Horn for use on Steering Post, black and nickel, each\$2.50
Each..D.P. \$3.55



No. 74 Horn, black and nickel, each\$4.00
Each..D.P. \$5.55



No. 71 Horn, black and nickel, each\$5.00
Each..D.P. \$5.55

Motorcycle Horns



No. 19 Motorcycle Horn, 3 1/2-inch Bell, nickel plated and polished, each\$2.00
Each..D.P. \$2.22



No. 26 Bullfrog, 4 1/2-inch Bell. Especially suited for Motorcycles, nickel plated, each\$1.75
Each..D.P. \$2.00



No. 21 Motorcycle Horn, 4 1/2-inch Bell, highly finished in polished nickel, each\$2.25
Each..D.P. \$2.66

Horn Parts and Attachments



No. 25 Horn Reed soldered with nipple, one end fits horn, other tube. Brass mounting; guaranteed; put up in separate boxes, each\$0.30
Per Dozen..D.P. \$3.77
No. 26. Same as No. 25, only nickeled finish, each. .35
Per Dozen..D.P. \$4.00
No. 27. Same as No. 25, only black finish, each... .35
Per Dozen..D.P. \$4.00
No. 28. Horn Reed with double end bushing for use in center of tube, brass finish, each..... .30
Per Dozen..D.P. \$3.77
No. 29. Same as No. 28, only nickeled finish, each. .35
Per Dozen..D.P. \$4.00
No. 30. Same as No. 28, only black finish, each.... .35
Per Dozen..D.P. \$4.00



HORN PARTS AND ATTACHMENTS

Bulbs



- No. 8. Horn Bulb, size $3\frac{1}{2} \times 5$, with brass mountings, each\$0.75
 Each..D.P. \$0.80 Per Dozen..D.P. \$8.88
- No. 18. Horn Bulb, size $3\frac{1}{2} \times 5$, with nickel mountings, each80
 Each..D.P. \$0.88 Per Dozen..D.P. \$9.66
- No. 12. Horn Bulb, size $3\frac{1}{2} \times 5\frac{1}{2}$, with brass mountings, each90
 Each..D.P. \$1.11 Per Dozen..D.P. \$12.00
- No. 112. Horn Bulb, size $3\frac{1}{2} \times 5\frac{1}{2}$, with nickel mountings, each 1.00
 Each..D.P. \$1.22 Per Dozen..D.P. \$13.32
- No. 15. Horn Bulb, size $4 \times 6\frac{1}{2}$, with brass mountings, each 1.00
 Each..D.P. \$1.32 Per Dozen..D.P. \$14.66
- No. 115. Horn Bulb, size $4 \times 6\frac{1}{2}$, with nickel mountings, each 1.10
 Each..D.P. \$1.44 Per Dozen..D.P. \$16.00

Reeds



- No. 20. Horn Reeds, tapered, each\$0.20
 Per Dozen..D.P. \$2.22

Tubing



- No. 31. Flexible Horn Tubing, brass $40 \times \frac{1}{2}$, each...\$1.00
 Each..D.P. \$1.32
- No. 32. Flexible Horn Tubing, nicked $40 \times \frac{1}{2}$, each. 1.10
 Each..D.P. \$1.54
- No. 34. Flexible Horn Tubing, brass $50 \times \frac{1}{2}$, each... 1.25
 Each..D.P. \$1.54
- No. 35. Flexible Horn Tubing, nicked, $50 \times \frac{1}{2}$, each 1.40
 Each..D.P. \$1.77
- No. 41. Flexible Horn Tubing with reed in center, brass, $40 \times \frac{1}{2}$, each 1.75
 Each..D.P. \$2.22
- No. 42. Flexible Horn Tubing with reed in center, nicked, $40 \times \frac{1}{2}$, each 1.90
 Each..D.P. \$2.44
- No. 44. Flexible Horn Tubing with reed in center, brass, $50 \times \frac{1}{2}$, each 2.00
 Each..D.P. \$2.44
- No. 45. Flexible Horn Tubing with reed in center, nicked, $50 \times \frac{1}{2}$, each 2.25
 Each..D.P. \$2.66

ELECTRIC HORNS

Rexo II Horn



The Rexo II Horn, an electric vibrator horn, effective and durable. Search for the ideal electric horn at a reasonable price has been going on since cars were invented. Rexo solves the problem and offers exceptional quality, character and value. The Rexo Horn is worked on the simple vibrator principle; it is particularly adapted for smaller cars. The service which the Rexo can be depended upon to deliver, will please your customers, and gives them confidence in you and your store. It is a trade builder—a leader. Rexo Horns are finished in black and nickel, black and brass, and all black enamel, and are ready for instant installation on any car.

- Rexo II Horn, black, each\$5.00
 Rexo II Horn, black and brass, each 5.00
 Rexo II Horn, black and nickel, each 5.00
 Each..D.P. \$5.00 Per Dozen..D.P. \$56.00

Maxim—The Perfect Buzzer Horn



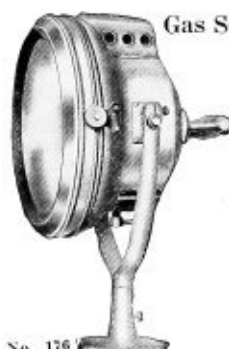
The Maxim Vibrator Horn is a wonderful warning signal, excelling in its class for its sound and for its permanent and efficient service. Is neat in appearance, simple in construction and has a loud and pleasing tone.

- Maxim Horn, brass, each\$4.50
 Maxim Horn, black and brass, each 4.50
 Maxim Horn, black and nickel, each 4.50
 Maxim Horn, black, each 4.50
 Each..D.P. \$4.66 Per Dozen..D.P. \$53.33



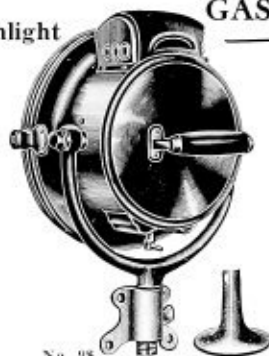
GAS LAMPS

Gas Searchlight



No. 176

Deck Base



No. 98

Dash Base Deck Base

This lamp is made of very heavy gauge brass finished in black and nickel, short coupled and in one piece, equipped with genuine mangin mirror and silver front reflector. Has solid brass fork brackets, black enameled, which allow vertical and lateral movements, and is provided with thumb nuts to lock in any position desired.

No. 176 Gas Searchlight, 8½-in. front, black and nickel finish, with deck base, each.....\$11.00
Each.....D.P. \$13.88

No. 276 Same as above with dash base for use on commercial trucks or motor cars, each..... 11.00
Each.....D.P. \$13.88

No. 177 Gas Searchlight, 9½-in. front, black and nickel finish, with deck base, each..... 12.00
Each.....D.P. \$14.44

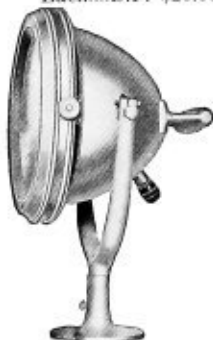
No. 277 Same as above with dash base for use on commercial trucks or motor cars, each..... 12.00
Each.....D.P. \$14.44

No. 98 Gas Searchlight, diameter 11 in., with 7-in. Mangin mirror, made of heavy gauge brass and heavy malleable iron; swivel brackets. Specially for use on trucks. Will stand the most severe road tests. Finish black and nickel; dash base. Each..... 16.00
Each.....D.P. \$20.00

No. 198 Same as 98 with deck base, each..... 16.00
Each.....D.P. \$20.00

Electric Searchlight

Torpedo Type



This lamp is made of extra heavy gauge brass, finished in black and nickel, with genuine silver-plated parabolic reflector and Ediswan base. Has solid brass black enameled fork brackets which allow vertical and lateral movements and can be locked in any position desired.

No. 165 Electric Searchlight, 7-in. front, black and nickel finish, with deck base, each.....\$9.00
Each.....D.P. \$11.66

No. 265 Same as above with dash bracket for use on commercial trucks or motor cars, each.....\$ 9.00
Each.....D.P. \$11.66

No. 166 Electric Searchlight, 8½-in. front, black and nickel finish, with deck base, each..... 9.50
Each.....D.P. \$12.77

No. 266 Same as above with dash bracket, each..... 9.50
Each.....D.P. \$12.77

No. 167 Electric Searchlight, 9½-in. front, black and nickel finish, with deck base, each..... 10.00
Each.....D.P. \$13.33

No. 267 Same as above with dash bracket, each..... 10.00
Each.....D.P. \$13.33

Gas Headlights



8-inch Gas

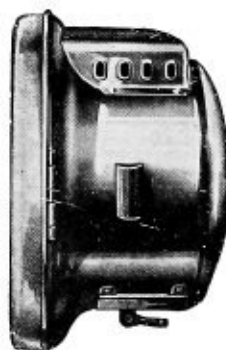
Lights both sides of the road by means of the beveled silvered reflector in addition to the spotlight which is thrown far ahead by the large ground glass Mangin mirror.

Front glass is heavy gauge and held in place by beveled silvered reflector.

The large Mangin mirror is held in place by three screws and lugs, instantly removable.

No. 8 Gas Headlight, 8-in. front, 5-in. Mangin mirror, 6½-in. prop center, finish black and brass, per pair.....\$8.50
Per pair.....D.P. \$11.66

No. 80 Same as No. 8, black and nickel, per pair.... 8.50
Per pair.....D.P. \$11.66



10-inch Gas

Latest model of gas headlight, close coupled type—far superior to anything on the market, in the way of medium priced lamp. It is compact, large in diameter and short in length. One-piece body, made of heavy gauge material throughout, and will stand all kinds of hard usage. Easy to clean and will give a most brilliant light.

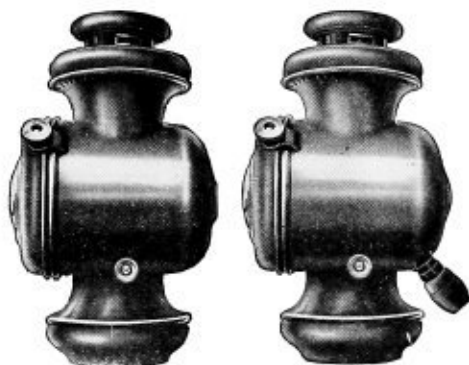
Genuine ground glass mirror and silvered front reflector. All parts interchangeable and easily removed for cleaning or repairs. This lamp will appeal to manufacturer, dealer and consumer.

No. 10 Gas Headlight, 10-in. front, 6-in. Mangin mirror, 8½-in. prop center, finish black and brass, per pair.....\$10.00
Per pair.....D.P. \$13.88

No. 100 Same as No. 10, black and nickel, per pair 10.00
Per pair.....D.P. \$13.88

LAMPS

Oil, Side and Tail Lamps



Nos. 26 and 126

Nos. 226 and 326

This new type lamp is beautiful in design, the work construction throughout, all parts interchangeable and fitting perfectly.

Oil pot locks with a simple turn of the wrist. Semaphore lens used, retained by a snap ring; door fastened by a spring catch and a knurled nut.

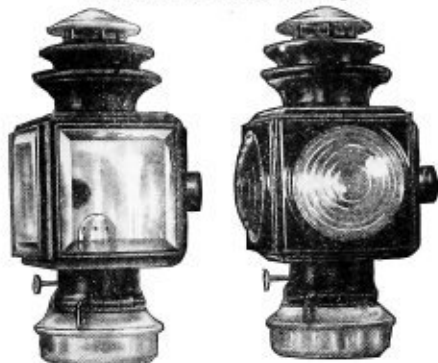
No. 26 Oil Side Lamp, height 8½ inches, body 4x4½, fitted with red jewel in rear, finished black and brass, per pair \$5.00
Per pair, D.P. \$6.06

No. 226, same as No. 26 only combination oil and electric, per pair 6.00
Per pair, D.P. \$8.33

No. 126 Oil Side Lamp, height 8½ inches, body 4x4½, fitted with red jewel in rear, finish black and nickel, per pair 5.00
Per pair, D.P. \$6.06

No. 326, same as No. 126 only combination oil and electric, per pair 6.00
Per pair, D.P. \$8.33

Oil, Side and Tail Lamps



Nos. 22 and 122

Nos. 23 and 123

Square Side Oil Lamp—Suitable for all types of cars and has a very attractive appearance. Prop riveted through heavy steel plates on the inside. The strongest possible construction. Will not leak oil and has many other exclusive features.

Square Tail Oil Lamp—An absolutely dependable tail lamp, suitable for large or small cars. Fitted with Red Semaphore, Green Semaphore and White Semaphore lens. Cold blast method of draft. Extra heavy gauge. The most attractive tail lamp on the market. The door swings outward and when the match is inserted it is on a parallel line with the wick. A vertical ball of fire on the rear of any car.

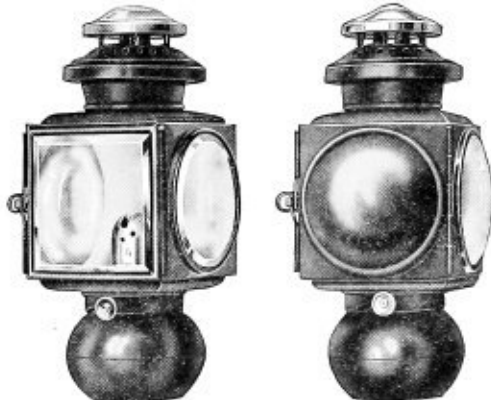
No. 22 Oil Side Lamp, height 11½ inches, body 4½x4½, finish black and brass, per pair \$6.00
Per pair, D.P. \$7.77

No. 122, same as No. 22, black and nickel finish, per pair... 6.00
Per pair, D.P. \$7.77

No. 23 Oil Tail Lamp, height 11½ inches, body 4½x4½, finish black and brass, each 3.00
Each, D.P. \$3.88

No. 123, same as No. 23, black and nickel finish, each 3.00
Each, D.P. \$3.88

E. & J. Oil, Side and Tail Lamps



Nos. 32 and 132

Nos. 12 and 112

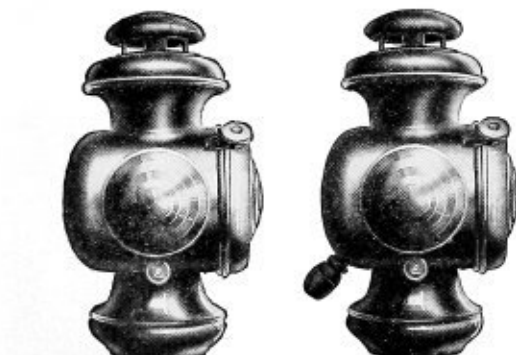
The down draught, or cold blast principle, has been perfected in this type of lamp and has given satisfaction to users for years. All lamps are made from heavy gauge stock. Tops are double clinched and riveted. Steel reinforced combination prop. Heavy silver-plated lining. Oil fount securely fastened. French beveled plate glass. Warranted to stay lighted under all conditions.

No. 32 E. & J. Oil Side Lamp, 10½ inches high, body 4x4 inches, black and brass, per pair \$7.00
Per pair, D.P. \$7.77

No. 132 E. & J. Oil Side Lamp, 10½ inches high, body 4x4 inches, black and nickel, per pair 7.00
Per pair, D.P. \$7.77

No. 12 E. & J. Oil Tail Lamp, 10 inches high, body 4x4 inches, black and brass, each 3.50
Each, D.P. \$4.22

No. 112 E. & J. Oil Tail Lamp, 10 inches high, body 4x4 inches, black and nickel, each \$3.50
Each, D.P. \$4.22



Nos. 24 and 124

Nos. 224 and 324

This lamp is vibration proof. It is almost indestructible—made of heavy steel, tin-coated to prevent rusting.

No. 24 Oil Tail Lamp, height 8½ inches, body 4x4½, both crystal and ruby lens of the semaphore type, finish black and brass, each \$2.50
Each, D.P. \$3.33

No. 224, same as No. 24 only combination oil and electric, each 3.00
Each, D.P. \$4.22

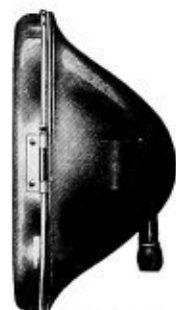
No. 124 Oil Tail Lamp, height 8½ inches, body 4x4½, both crystal and ruby lens of the semaphore type, finish black and nickel, each 2.50
Each, D.P. \$3.33

No. 324, same as No. 124 only combination oil and electric, each 3.00
Each, D.P. \$4.22



ELECTRIC HEAD AND SIDE LIGHTS

The Bullet Type



10-inch Bullet

Our Bullet lamps are made of the very best material and workmanship, quality being the watchword all along the line. They are the finest lamps which we know how to make and each and every one is carefully focused before leaving the factory.

No. 210 Electric Headlight, 10-in. front, 7-in. prop center, finish black and brass, per pair.....\$8.00

Per pair....D.P. \$9.44

No. 310 Same as 210, black and nickel finish, per pair.....8.00

Per pair....D.P. \$9.44

These lamps supplied with extra dimmer bulb at \$1.50 per pair extra.

Per pair....D.P. \$2.22 extra.

No. 211 Electric Headlight, 11½-in. front, 8½-in. prop center, finish black and brass, per pair.....\$10.50

Per pair....D.P. \$14.44

No. 311 Same as 211, black and nickel finish, per pair.....10.50

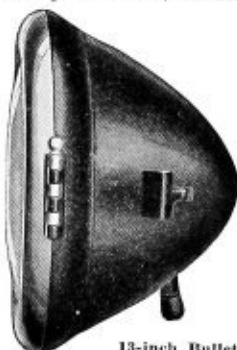
Per pair....D.P. \$14.44



11½-inch Bullet

These lamps supplied with extra dimmer bulb at \$1.50 per pair extra.

Per pair....D.P. \$2.22 extra.



13-inch Bullet

Thirteen-inch Bullet Headlight. Projects an intense light for a quarter of a mile ahead. The most powerful electric headlight made. Furnished regularly for the 16-candle power bulb, but on special order and at the usual advances in price we furnish reflectors fitted for the 16-c. p. and 4-c. p. separate bulbs.

Focusing Sockets—Connect with plug and cap are included.

Convex die-made glass in front.

No. 213 Electric Headlight, 13-in. front, 9½-in. prop center, finish black and brass, per pair.....\$16.50

Per pair....D.P. \$24.44

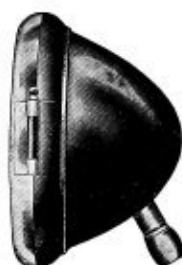
No. 313 Same as 213, black and nickel finish, per pair.....16.50

Per pair....D.P. \$24.44

These lamps supplied with extra dimmer bulb at \$1.50 per pair extra.

Per pair....D.P. \$2.22 extra.

The Bullet Type



6-inch Bullet

No. 106 Electric Side Light, 6-in. front, finish black and brass, per pair.....\$5.50

Per pair....D.P. \$8.33

No. 206 Electric Side Light, 6-in. front, finish black and nickel, per pair.....5.50

Per pair....D.P. \$8.33

Dash Lamp



No. 30

Convex Flange Dash Lamp. Furnished with white semaphore, plain white or frosted with rosette glass as shown in cut. No screws visible when placed on dash. Ediswan socket. Door at rear of lamp.

No. 30 Dash Lamp, 4½-in. front, nickered finish, per pair.....\$4.50

Per pair....D.P. \$6.11

Combination Head and Side Light



No. 33A

11½-inch Bullet New Light and 3-inch Upper Lamp

Black and Nickel Finish, per pair.....\$16.00

Per pair....D.P. \$20.00

This is an ideal combination, as it has both head and side light in practically the same case. This same style lamp is used on some of the most popular and high-priced cars; makes an excellent appearance, simplifies the wiring scheme, and as the upper or side lamp is fitted with special corrugated glass it complies with the "dimmer" ordinances now in force in many cities.



TAIL LAMPS

Electric Tail Lamps



No. 32

Made from heavy gauge material and fitted with Edison Switch Socket. This lamp is the very latest design in a high grade tail lamp. Convex Semaphore Glass.

No. 32. Electric Tail Lamp, each\$1.25
Each..D.P. \$1.66



No. 32L

Same as No. 32 with License Tag Attachment.

No. 32-L. Electric Tail Lamp, each\$2.00
Each..D.P. \$2.77



No. 33

Designed to be screwed to number bracket or back of car. Light thrown down on license number. Length 6 1/2 inches. Size of Ruby Semaphore lens, 2 1/2 inches diameter, Edison Switch Socket used. Small white jewel in end of lamp. A very handsome and essential lamp for city use where legal requirements demand lighting of license.

No. 33. Electric Tail Lamp, each\$2.25
Each..D.P. \$3.33

LAMPS

Electric Spotlight

This miniature electric searchlight is indispensable when touring at night to light signboards and street numbers. Equipped with universal swing bracket, which allows vertical and lateral movements. Can be attached anywhere within reach of the driver.

No. 60. Electric Spotlight, 7-inch front, finished in black and nickel, each\$10.00
Each..D.P. \$9.44



Dome Lamps



Dome Lamps with Holophone Globe and highly-polished silver reflector.

Dome Lamp, 3-inch, each\$3.00
Each..D.P. \$3.33
Dome Lamp, 4-inch, each 3.50
Each..D.P. \$3.88
Dome Lamp, 5-inch, each 4.00
Each..D.P. \$4.44

Reflectors

These reflectors are made of extra heavy gauge brass, sterling silver finish. Bulbs not included in price.

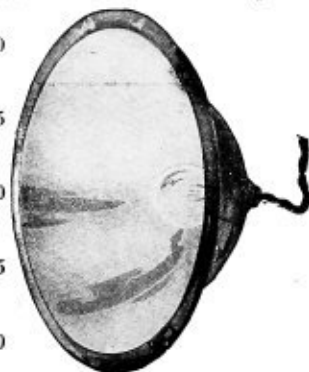
Parabola Reflectors,
6-inch, per pair..\$3.50
Per pair.D.P. \$2.44

Parabola Reflectors,
7-inch, per pair.. 3.75
Per pair.D.P. \$2.77

Parabola Reflectors,
8-inch, per pair.. 4.00
Per pair.D.P. \$3.33

Parabola Reflectors,
9-inch, per pair.. 4.25
Per pair.D.P. \$3.55

Parabola Reflectors,
10-inch, per pair. 4.50
Per pair.D.P. \$5.33





Gibson Quality Miniature Tungsten Bulbs

WITHIN the last few years nearly every automobile built has been equipped with electric lights, and a number of the older cars manufactured in earlier years have been fitted with the necessary battery or generator to furnish electric lighting. Nearly seventy-five per cent of all the machines turned out in 1915 will be electrically lighted.

This has created a large demand for suitable electric bulbs (lamps), that will meet the varying demands of automobile lighting, and be able to stand the abuse to which they are subjected.

We offer the Gibson Quality electric bulbs

(lamps) as being the best possible to manufacture. Our Engineering Department made exhaustive tests to determine the life, current consumption and construction of all the popular lamps now on the market. The Gibson Quality Bulbs will stand more vibration without breaking the tungsten filament, will give from ten to twenty-five per cent longer life, and are made of better and more uniform materials than any of those tested.

The Gibson Quality Bulbs will give an intense *white* light and will use a minimum of current. The filament is made from imported tungsten, tested for strength and resistance.

Different voltages are used on different cars. Some are wired for 6 volts, others for 7, 12, 14, 18 and 24 volts. We carry a complete line of all candle-powers and voltages.

The cuts shown on this page are actual size. Consult the list on the opposite page to find the candle-power and voltage used in the various size bulbs.



Size G-16 1/2



Size G-12



Size G-10



Size G-8



Size G-6



Gibson Quality Miniature Tungsten Bulbs

GIBSON QUALITY Miniature Tungsten Bulbs are furnished in either Single Contact Base, Double Contact Base or Candelabra Base. It is essential that you specify the type of base you desire when ordering.

For your convenience we show the three forms of bases, the cuts are full size.

Inasmuch as voltages and candle-power vary, please be sure to give the *Voltage*, *Candle-Power* and *Style of Base* in every case.

The Gibson Quality Bulbs are packed in heavy cotton felt, two to a package, ten packages (20 lamps) to the carton. Order them in cartons or in multiples of ten—for your convenience.



Candelabra



Double Contact



Single Contact

Voltages and Candle-Power

Voltage	Candle Power	Style	Diameter	Each
3-3½-6-7-8	2	G-6	¾-inch	\$0.21
Ea., D.P. \$0.33. Lots of 20., Ea., D.P. \$0.29				
3-3½-6-7-8	4	G-8	1-inch	\$0.21
Ea., D.P. \$0.33. Lots of 20., Ea., D.P. \$0.29				
3-3½-6-7-8	6	G-8	1-inch	\$0.24
Ea., D.P. \$0.38. Lots of 20., Ea., D.P. \$0.33				
6-7-8	8	G-10	1½-inch	\$0.27
Ea., D.P. \$0.41. Lots of 20., Ea., D.P. \$0.38				
6-7-8	10	G-12	1½-inch	\$0.27
Ea., D.P. \$0.41. Lots of 20., Ea., D.P. \$0.38				
6-7-8	12	G-12	1½-inch	\$0.27
Ea., D.P. \$0.41. Lots of 20., Ea., D.P. \$0.38				
6-7-8	16	G-16½	2 ⅛-inch	\$0.27
Ea., D.P. \$0.41. Lots of 20., Ea., D.P. \$0.38				
6-7-8	18	G-16½	2 ⅛-inch	\$0.27
Ea., D.P. \$0.41. Lots of 20., Ea., D.P. \$0.38				
6-7-8	21	G-16½	2 ⅛-inch	\$0.30
Ea., D.P. \$0.46. Lots of 20., Ea., D.P. \$0.41				
6-7-8	24	G-16½	2 ⅛-inch	\$0.30
Ea., D.P. \$0.46. Lots of 20., Ea., D.P. \$0.41				
12-14	2	G-6	¾-inch	\$0.24
Ea., D.P. \$0.38. Lots of 20., Ea., D.P. \$0.33				

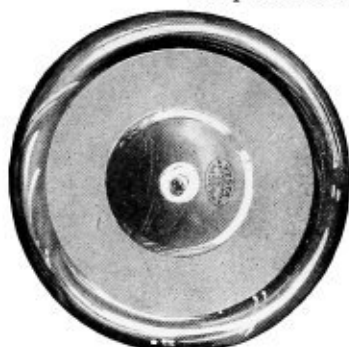
Voltages and Candle-Power

Voltage	Candle Power	Style	Diameter	Each
18-21	2	G-6	¾-inch	\$0.35
Ea., D.P. \$0.53. Lots of 20., Ea., D.P. \$0.48				
12-14	4	G-8	1-inch	\$0.24
Ea., D.P. \$0.38. Lots of 20., Ea., D.P. \$0.33				
18-21	4	G-8	1-inch	\$0.40
Ea., D.P. \$0.62. Lots of 20., Ea., D.P. \$0.58				
12-14	6	G-8	1-inch	\$0.30
Ea., D.P. \$0.46. Lots of 20., Ea., D.P. \$0.41				
12-14	12	G-12	1½-inch	\$0.30
Ea., D.P. \$0.46. Lots of 20., Ea., D.P. \$0.41				
18-21	6	G-8	1-inch	\$0.40
Ea., D.P. \$0.62. Lots of 20., Ea., D.P. \$0.33				
12-14	16	G-16½	2 ⅛-inch	\$0.30
Ea., D.P. \$0.46. Lots of 20., Ea., D.P. \$0.41				
12-14	18	G-16½	2 ⅛-inch	\$0.30
Ea., D.P. \$0.46. Lots of 20., Ea., D.P. \$0.41				
18-21	16	G-16½	2 ⅛-inch	\$0.50
Ea., D.P. \$0.77. Lots of 20., Ea., D.P. \$0.71				
18-21	18	G-16½	2 ⅛-inch	\$0.50
Ea., D.P. \$0.77. Lots of 20., Ea., D.P. \$0.71				
12-14	21	G-16½	2 ⅛-inch	\$0.35
Ea., D.P. \$0.53. Lots of 20., Ea., D.P. \$0.48				
18-21	21	G-16½	2 ⅛-inch	\$0.55
Ea., D.P. \$0.84. Lots of 20., Ea., D.P. \$0.78				



HEADLIGHT DIMMERS

Eclipse Dimmer



The Eclipse Dimmer consists of a ground or frosted glass with a metal disc covering a clear glass center. Dims the headlight and at the same time furnishes sufficient driving light for city driving.

The center disc, which is securely held in place, can be removed in a few seconds and the powerful beam of light is emitted through the clear center for use in country driving.

The outer ring of ground glass diffuses more light directly in front of the car as well as at the curb, so a better driving light is obtained than if an entirely clear glass is used.

We furnish these in squares, which can be cut in circles to required size.

Eclipse Dimmers, 9-inch Ford size, per pair.....\$2.00
Per pair...D.P. \$3.33

Eclipse Dimmers, 10-inch, per pair..... 2.50
Per pair...D.P. \$4.18

Eclipse Dimmers, 12-inch, per pair..... 3.00
Per pair...D.P. \$5.00

J-M Non-Blinding Lens



The J-M Lens introduces a new era in vehicle headlights. Instead of the blinding flash and dazzling glare which have heretofore made night-driving difficult and dangerous, this invention provides a non-blinding yet searching beam surrounded by soft diffused light which illuminates the front of the car and all the road from side to side.

The J-M Lens is made of especially curved glass, frosted over its entire surface, except for a carefully designed central trans-

parent portion. Through this clear portion a searching ray is projected far ahead and slightly downward upon the road in the direction most needed.

Sizes as follows:

No.	Overall Diam.	Flange.	Dome Diam.
No. 1	8 in.	2 in.	7 1/2 in.
No. 2	8 1/2 in.	2 in.	7 1/2 in.
No. 3	9 in.	2 in.	8 1/2 in.
No. 4	9 1/2 in.	2 in.	8 1/2 in.
No. 5	10 in.	2 in.	9 1/2 in.
No. 6	10 1/2 in.	2 in.	9 1/2 in.
No. 7	11 in.	2 in.	10 1/2 in.
No. 8	11 1/2 in.	2 in.	10 1/2 in.
No. 9	12 in.	2 in.	11 in.

When ordering, give both the overall diameter of the glass (not of the lamp) and give the exact size of the opening in the front door.

J-M Non-Blinding Lens, per pair.....\$3.25
Per pair...D.P. \$5.77

Anti-Dazzle

Anti-Dazzle is a quick drying, permanent frosting liquid for coating glass of all powerful electric headlights. It eliminates that blinding glare and dazzle, enabling you to use your headlights in the city without violating the law and without loss of illuminating power for country driving; forms a peculiar transparent white frosting which removes the glare without affecting the lighting power. It dries quickly and will not rub off; looks well and covers the law without causing inconvenience and bother.



Anti-Dazzle Complete Outfit, enough for two sets
head and side lights, each.....\$0.75
Each...D.P. \$1.11

Glasses for Side and Tail Lamp



Semaphore Lenses

Size		White	Green	Ruby
2 1/4	Per Dozen...D.P.	\$1.50	\$1.65	\$1.90
3	Per Dozen...D.P.	1.65	1.90	2.20
3 1/4	Per Dozen...D.P.	1.80	2.10	2.40
3 1/2	Per Dozen...D.P.	1.95	2.25	2.50
3 3/4	Per Dozen...D.P.	2.10	2.40	2.70
3 1/2	Per Dozen...D.P.	2.40	2.70	3.00

Size		White	Green	Ruby
2	Per Dozen...D.P.	\$1.20	\$1.35	\$1.50
2 1/4	Per Dozen...D.P.	1.35	1.50	1.65
2 1/2	Per Dozen...D.P.	1.50	1.65	1.90
3 1/4	Per Dozen...D.P.	1.65	1.95	2.25
3 1/2	Per Dozen...D.P.	1.80	2.10	2.40
3 3/4	Per Dozen...D.P.	2.10	2.40	2.70

Plain Lenses

1 1/4-inch Flanged Ruby Jewels, per dozen, D.P.....\$1.20
1 1/2-inch Flanged Ruby Jewels, per dozen, D.P..... 1.35

Bulb Case



Bulbs are securely held in place by brass springs and a new locking device.

No. 1 Dover Electric Light Bulb Case, for Ediswan base lamps, holds two headlights, two side lights, tail and speedometer lights. Made of pressed steel, each.....\$0.75
Each...D.P. \$1.11

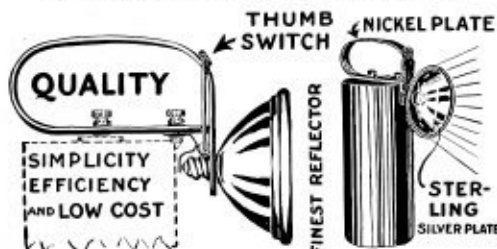


HAND LAMPS

For use in connection with Dry Batteries.

We list on this page a line of Hand Lamps, to be used in connection with dry batteries. While simple, this type of lamp has proven one of the greatest discoveries of the age. It replaces the old style oil lantern, which was both dangerous and cumbersome. With the oil lantern there was constant liability of fire or explosion, and there is no question but many fires had their origin in the lantern with the open flame. The styles shown below are selected for their popularity and efficiency. They are all guaranteed by the manufacturer and will give excellent service. These lamps are indispensable to the motorist, garage owner, farmer, railroad men, store-keepers, mechanics, watchmen, electricians, milkmen, miners, hunters, physicians and most every one who has occasion to work at night or in dark places. Any standard dry battery, No. 6 size, will operate these lamps.

Thompson's Electric Hand Lamp



Thompson's popular electric hand lamp is the simplest hand lamp made; is composed of a convenient handle with properly located switch carrying a true parabolic or automobile type reflector of best construction and workmanship; throws a brilliant beam of white light three hundred feet or more.

Without battery.....\$0.75
Without battery, dozen..D.P. \$13.32

The Delta Electric Hand Lamp

The Lamp of 1,000 Uses



This is a very sturdy hand lamp, is very popular and has a big demand. Will burn continuously for 40 hours. Built for life-time use; with brilliant black enamel steel case, non-tarnishing; French mirror glass reflector; special Tungsten bulb; imported ground polished lens.

Each.....\$1.50
Without battery, each..D.P. \$2.22
Without battery, dozen..D.P. \$24.00
Extra bulb, each..D.P. \$0.40

"Dads" Electric Hand Lantern

For extra long service and a very bright light "Dads" lantern is recommended. This lantern uses two No. 6 round dry batteries and has a very strong electric bulb. The case is of pressed steel, with easily removable lid. Enameled in red.

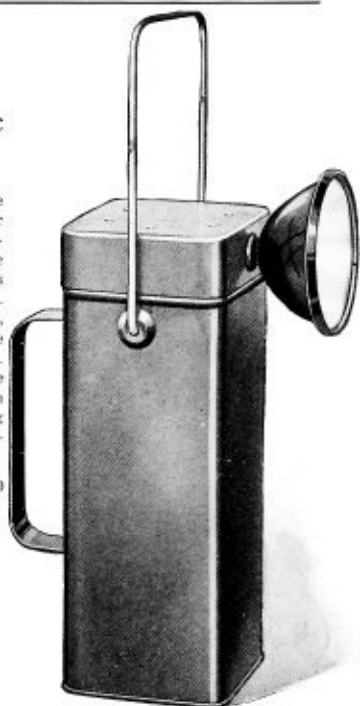
Price each.....\$2.50
Without battery, each..D.P. \$3.32
Without battery, dozen..D.P. \$36.80



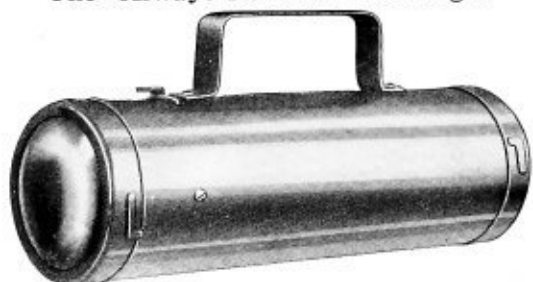
Vaco-Lite Electric Hand Lantern

A well-made, high-grade lantern in which either round or square dry batteries may be used. Give forty hours continuous service from one cell. Used an hour every day, six weeks service from one battery is not unusual. Made from high-grade sheet steel, enameled in black. Bale is of strong wire. Has special reflector and bulb.

Each.....\$1.50
Without battery, each..D.P. \$1.66
Without battery, dozen..D.P. \$18.66
Extra bulb, each..D.P. \$0.33



The "Always Reliable" Searchlight



Some desire a lamp with the light in the head, to be carried as shown in the illustration. The Always Reliable is one of the best designed and constructed of the hand lamps. Can be furnished with either one or two dry batteries. The case is of pressed steel, beautifully oxidized.

Each.....\$1.50
Without battery, each..D.P. \$2.00
Without battery, dozen..D.P. \$21.66

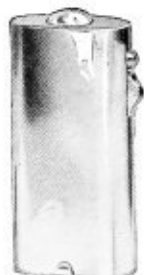


EVEREADY TUNGSTEN FLASHLIGHTS

Vest Pocket Flashlights

Hinged Bottom Type Nickel-Plated Flashlights Nos. 6900-6961-6962 and 6954 have combination push and slide contact, are equipped with hinged bottom—battery inserted at the bottom.

Push Telescope Top Type Nickel-Plated Flashlights Nos. 6970-6971 and 6972 have slide contact and are equipped with telescope top, which permits insertion of battery at top of case and eliminates adjustment of battery contacts. The bulb can be readily removed, as access is provided to its base by removing the telescope top.



Hinged Bottom Type
(Representing
Nos. 6900, 6961, 6962 and 6954)



Push Top Type
(Representing Nos. 6970, 6971 and 6972)

Size 2½x1½x11/16 inches—	
No. 6900—Nickel-Plated, Hinged Bottom Type (complete), each	\$.75
Each...D.P. \$1.11 Dozen...D.P. \$12.00	
No. 6970—Nickel-Plated, Push Top Type (complete), each	.85
Each...D.P. \$1.26 Dozen...D.P. \$13.56	
Renewal Tungsten Battery No. 700, each	.30
Each...D.P. \$0.44 Dozen...D.P. \$5.33	
Renewal Mazda Bulb, 2½ Volts, No. 1179, each	.13
Each...D.P. \$0.20 Dozen...D.P. \$2.40	
Size 2 15/16x1½x½ inches—	
No. 6961—Nickel-Plated, Hinged Bottom Type (complete), each	.75
Each...D.P. \$1.11 Dozen...D.P. \$12.00	
No. 6971—Nickel-Plated, Push Top Type (complete), each	.85
Each...D.P. \$1.26 Dozen...D.P. \$13.56	
Renewal Tungsten Battery No. 750, each	.30
Each...D.P. \$0.44 Dozen...D.P. \$5.33	
Renewal Mazda Bulb, 2.5 Volts, No. 1180, each	.13
Each...D.P. \$0.20 Dozen...D.P. \$2.40	
Size 2 15/16x2x½ inches—	
No. 6962—Nickel-Plated, Hinged Bottom Type (complete), each	1.00
Each...D.P. \$1.48 Dozen...D.P. \$16.00	
No. 6972—Nickel-Plated, Push Top Type (complete), each	1.10
Each...D.P. \$1.44 Dozen...D.P. \$17.00	
Renewal Tungsten Battery No. 751, each	.40
Each...D.P. \$0.60 Dozen...D.P. \$7.20	
Renewal Mazda Bulb, 3.8 Volts, No. 1181, each	.13
Each...D.P. \$0.20 Dozen...D.P. \$2.40	
Size 1x1½x3 inches—	
No. 6954—Nickel-Plated, Hinged Bottom Type (complete), each	1.00
Each...D.P. \$1.48 Dozen...D.P. \$16.00	
Renewal Tungsten Battery No. 792, each	.30
Each...D.P. \$0.44 Dozen...D.P. \$5.33	
Renewal Mazda Bulb, 2.7 Volts, No. 1182, each	.13
Each...D.P. \$0.20 Dozen...D.P. \$2.40	

Vest Pocket Flashlights

The Cigarette Case Type offers a novel and at the same time very practical type of Nickel-plated Flashlight, very similar in appearance to a cigarette case. Being hinged on one side, is easily opened for withdrawal or insertion of battery or bulb. Has a handy contact switch, and its practicability and novelty makes it a ready seller.

The Quadruple Silver-plated line of Flashlights meets with a ready demand for gifts, prizes, etc., as they are made in a very attractive design, are reasonable in price and are very practical devices. Method of contact and battery insertion same as Nos. 6900, 6961 and 6962.



Cigarette Case Type
(Representing Nos. 6990, 6991 and 6992)



Silver-Plated Type
(Representing Nos. 6980, 6981 and 6982)

Size 2½x1½x11/16 inches—	
No. 6980—Quadruple Silver-Plated, Hinged Bottom Type (complete), each	\$1.25
Each...D.P. \$1.86 Dozen...D.P. \$20.00	
Size 2½x1½ inches—	
No. 6990—Nickel-Plated Cigarette Type (complete), each	1.00
Each...D.P. \$1.48 Dozen...D.P. \$16.00	
Renewal Tungsten Battery No. 700 for Nos. 6980-6990, each	.30
Each...D.P. \$0.44 Dozen...D.P. \$5.33	
Renewal Mazda Bulb, 2½ Volts, No. 1179, for Nos. 6980-6990, each	.13
Each...D.P. \$0.20 Dozen...D.P. \$2.40	
Size 2 15/16x1½x½ inches—	
No. 6981—Quadruple Silver-Plated, Hinged Bottom Type (complete), each	1.25
Each...D.P. \$1.86 Dozen...D.P. \$20.00	
Size 2½x1½ inches—	
No. 6991—Nickel-Plated Cigarette Type (complete), each	1.00
Each...D.P. \$1.48 Dozen...D.P. \$16.00	
Renewal Tungsten Battery No. 750 for Nos. 6981-6991, each	.30
Each...D.P. \$0.44 Dozen...D.P. \$5.33	
Renewal Mazda Bulb, 2.5 Volts, No. 1180, for Nos. 6981-6991, each	.13
Each...D.P. \$0.20 Dozen...D.P. \$2.40	
Size 2 15/16x2x½ inches—	
No. 6982—Quadruple Silver-Plated, Hinged Bottom Type (complete), each	1.50
Each...D.P. \$2.22 Dozen...D.P. \$24.00	
Size 3½x2½ inches—	
No. 6992—Nickel-Plated Cigarette Type (complete), each	1.25
Each...D.P. \$1.86 Dozen...D.P. \$20.00	
Renewal Tungsten Battery No. 751, for Nos. 6982-6992, each	.40
Each...D.P. \$0.60 Dozen...D.P. \$7.20	
Renewal Mazda Bulb, 3.8 Volts, No. 1181, for Nos. 6982-6992, each	.13
Each...D.P. \$0.20 Dozen...D.P. \$2.40	



EVEREADY TUNGSTEN FLASHLIGHTS

Tubular Flashlights

EVEREADY Flashlights are furnished complete, equipped with guaranteed longest service Eveready Tungsten batteries and highest efficiency, greatest durability Mazda lamps. They are thoroughly reliable, absolutely guaranteed against defects, the latest types of contacts, reflecting mechanisms, etc., being used throughout.



Representing Nos. 2602, 2604, 2606 and 2612.

Size 1½x5 inches—

No. 2602—Vulcanized Fiber Case (complete), each.....\$1.00
Each...D.P. \$1.48 Dozen...D.P. \$16.00

No. 2630—Metal Case Nickel-Plated (complete), each.....1.25
Each...D.P. \$1.86 Dozen...D.P. \$20.00

Renewal Tungsten Battery No. 791, each......30
Each...D.P. \$0.44 Dozen...D.P. \$5.33

Renewal Mazda Bulb, 2.7 Volts, No. 1182, each......13
Each...D.P. \$0.20 Dozen...D.P. \$2.40



Representing Nos. 2630, 2631 and 2632.

Size 1½x6½ inches—

No. 2604—Vulcanized Fiber Case (complete), each.....\$1.20
Each...D.P. \$1.77 Dozen...D.P. \$19.20

No. 2622—Snake Cloth Covered Case (complete), each......95
Each...D.P. \$1.42 Dozen...D.P. \$15.20

No. 2625—Alligator Cloth Covered Case (complete), each......95
Each...D.P. \$1.42 Dozen...D.P. \$15.20

No. 2624—Black Cloth Covered Case (complete), each......95
Each...D.P. \$1.42 Dozen...D.P. \$15.20

No. 2631—Metal Case Nickel-Plated (complete), each.....1.50
Each...D.P. \$2.22 Dozen...D.P. \$24.00

Renewal Tungsten Battery No. 799, each......30
Each...D.P. \$0.44 Dozen...D.P. \$5.33

Renewal Mazda Bulb, 2.9 Volts, No. 1198, each......13
Each...D.P. \$0.20 Dozen...D.P. \$2.40



Representing Nos. 2624, 2626 and 2627.

Size 1½x8½ inches—

No. 2606—Leatherette Covered Case (complete), each.....\$1.20
Each...D.P. \$1.77 Dozen...D.P. \$19.20

No. 2612—Vulcanized Fiber Case (complete), each.....1.40
Each...D.P. \$2.07 Dozen...D.P. \$22.40

No. 2626—Black Cloth Covered Case (complete), each.....1.00
Each...D.P. \$1.48 Dozen...D.P. \$16.00

No. 2627—Enameled Metal Case (complete), each......90
Each...D.P. \$1.33 Dozen...D.P. \$14.40

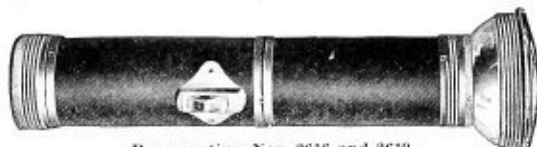
No. 2632—Metal Case, Nickel-Plated (complete), each.....1.75
Each...D.P. \$2.00 Dozen...D.P. \$28.00

Renewal Tungsten Battery No. 705, each......40
Each...D.P. \$0.60 Dozen...D.P. \$7.20

Renewal Mazda Bulb, 3.8 Volts, No. 1193, each......13
Each...D.P. \$0.20 Dozen...D.P. \$2.40

Miners' Flashlights

In selling Eveready Flashlights you establish a renewal feature which means continued business from satisfied customers. Flashlights are used in every walk of life, by watchmen, motorists, sportsmen, in the house, in the farm, in mines, around gas, gasoline, oil, gunpowder and other explosives. In fact, there is no end to the possibilities for flashlight sales.



Representing Nos. 2616 and 2619.

Size 1½x6½ inches—

No. 2616—Vulcanized Fiber Case (complete), each.....\$1.50
Each...D.P. \$2.22 Dozen...D.P. \$24.00

No. 2634—Metal Case, Nickel-Plated (complete), each.....2.00
Each...D.P. \$2.98 Dozen...D.P. \$32.00

Renewal Tungsten Battery No. 799, each......30
Each...D.P. \$0.44 Dozen...D.P. \$5.33

Renewal Mazda Bulb, 2.9 Volts, No. 1198, each......13
Each...D.P. \$0.20 Dozen...D.P. \$2.40



Representing Nos. 2633 and 2634.

Size 1½x8½ inches—

No. 2619—Vulcanized Fiber Case (complete), each.....\$1.50
Each...D.P. \$2.22 Dozen...D.P. \$24.00

No. 2633—Metal Case, Nickel-Plated (complete), each.....2.40
Each...D.P. \$3.55 Dozen...D.P. \$38.40

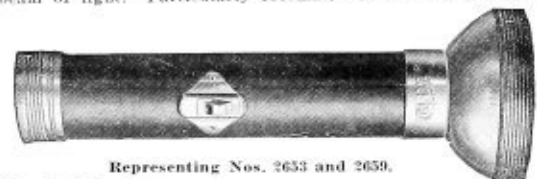
Renewal Tungsten Battery No. 705, each......40
Each...D.P. \$0.60 Dozen...D.P. \$7.20

Renewal Mazda Bulb, 3.8 Volts, No. 1193, each......13
Each...D.P. \$0.20 Dozen...D.P. \$2.40

All Metal, Nickel-Plated Flashlights listed above are non-short circuiting and can be placed in contact with other metal surfaces without exhausting the battery. This is especially advantageous where flashlights are placed in a tool box, in a pocket containing keys or in many other positions which would exhaust the battery in other than an all-metal case.

Searchlights

The most powerful and penetrating flashlights obtainable. Have high efficiency, silvered parabolic reflectors, accurately ground lenses, knurled fiber cases—throw a long, penetrating beam of light. Particularly recommended for severe service.



Representing Nos. 2653 and 2659.

Size 1½x8½ inches—

No. 2659—Complete, each.....\$3.00
Each...D.P. \$4.44 Dozen...D.P. \$48.00

Renewal Mazda Bulb, 3.8 Volts, No. 1193, each......13
Each...D.P. \$0.20 Dozen...D.P. \$2.40

Renewal Tungsten Battery No. 705, each......40
Each...D.P. \$0.60 Dozen...D.P. \$7.20

Size 1½x13 inches—

No. 2653—Complete, each.....4.00
Each...D.P. \$5.93 Dozen...D.P. \$64.00

Renewal Tungsten Battery No. 715, each......70
Each...D.P. \$1.04 Dozen...D.P. \$11.15

Renewal Mazda Bulb, 6.2 Volts, No. 1195, each......13
Each...D.P. \$0.20 Dozen...D.P. \$2.40



EVEREADY TUNGSTEN FLASHLIGHTS

Pistol Flashlight



Appeals to those who wish to combine novelty with utility. An exact reproduction of an automatic pistol. Has two-piece gun metal finish case, which is opened for withdrawal or insertion of battery or lamp by depressing the sight, releasing a catch in the interior of the barrel. Contact is made by pulling the trigger. Not necessary to adjust contacts when renewing battery. Size, 3 $\frac{1}{2}$ x 3 x 3.

No. 2675 Pistol Flashlight, complete.....	\$1.75
Each..D.P. \$2.60 Dozen..D.P. \$28.00	
Renewal Tungsten Battery No. 750.....	.30
Each..D.P. \$0.44 Dozen..D.P. \$5.33	
Renewal Mazda Bulb No. 1180, 2.5 volts.....	.13
Each..D.P. \$0.20 Dozen..D.P. \$2.40	

Tungsten Flashlight Batteries

Each Eveready Battery is absolutely guaranteed. This guarantee is printed on the battery and carton. It covers a definite period both of service and shelf life. We secure batteries at frequent intervals direct from the factory, insuring your receiving fresh stock. Batteries should be tested with a bulb and battery tester on receipt and before breaking seal for insertion in a flashlight. For complete information on batteries see data below.



Renewal Tungsten Batteries

For Flashlight Numbers	Battery No.	Height	Width	Depth	Each	Guarantee Period
6900-6970-6980-6990	700	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	\$0.30	2
Each..D.P. \$0.44	Dozen..D.P. \$5.33					
4706	703	2 $\frac{1}{2}$ "	2 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	.40	4
Each..D.P. \$0.60	Dozen..D.P. \$7.20					
2606-2612-2619-2626-						
2627-2632-2633-2659	705	7"	1 $\frac{1}{2}$ "		.40	6
Each..D.P. \$0.60	Dozen..D.P. \$7.20					
4701-4702	710	3"	3"		.75	6
Each..D.P. \$1.11	Dozen..D.P. \$12.00					
2653	715	11 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "		.70	6
Each..D.P. \$1.04	Dozen..D.P. \$11.15					
4703-4707	734	3"	4"	1 $\frac{1}{2}$ "	.45	6
Each..D.P. \$0.66	Dozen..D.P. \$7.20					
2675-6961-6971-6981-						
6991	750	2 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	.30	3
Each..D.P. \$0.44	Dozen..D.P. \$5.33					
6962-6972-6982-6992	751	2 $\frac{1}{2}$ "	2"	1 $\frac{1}{2}$ "	.40	3
Each..D.P. \$0.60	Dozen..D.P. \$7.20					
2604-2616-2624-2625-						
2631	790	4 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "		.30	6
Each..D.P. \$0.44	Dozen..D.P. \$5.33					
2602-2630	791	3 $\frac{1}{2}$ "	1"		.30	4
Each..D.P. \$0.44	Dozen..D.P. \$5.33					
6902-6952-6953	792	2 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	.30	4
Each..D.P. \$0.44	Dozen..D.P. \$5.33					
6954	792	3 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	.30	4
Each..D.P. \$0.44	Dozen..D.P. \$5.33					
4716 (Any 2 $\frac{1}{2}$ x6 inch dry cell may be used— "Gibson Quality" recommended)						

Eveready Bulb and Battery Tester



Eveready Bulb and Battery Tester permits the testing of flashlight batteries without placing a short circuit on them—which is the case when a pocket ammeter is used. It provides the only satisfactory means of testing flashlight lamps. There are three receptacles for the insertion of lamps of proper voltage for two, three and five cell batteries. Liberal leads are provided, which permit easy access to sealed batteries.

No. 6291 Bulb and Battery Tester, without Lamp, each	\$0.75
Each..D.P. \$1.11 Dozen..D.P. \$12.00	

Renewal Mazda Bulbs



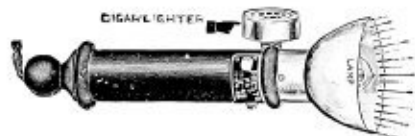
For Flashlight Numbers	Bulb No.	Voltage	Each
6900-6970-6980-6990	1179	3.5	\$0.13
Each..D.P. \$0.20	Dozen..D.P. \$2.40		
4706	1190	3.8	.13
Each..D.P. \$0.20	Dozen..D.P. \$2.40		
2606-2612-2619-2626-			
2627-2632-2633-2659	1193	3.8	.13
Each..D.P. \$0.20	Dozen..D.P. \$2.40		
4701-4702	1195	6.2	.13
Each..D.P. \$0.20	Dozen..D.P. \$2.40		
2653	1195	6.2	.13
Each..D.P. \$0.20	Dozen..D.P. \$2.40		
4703-4707	1199	4.0	.13
Each..D.P. \$0.20	Dozen..D.P. \$2.40		
2675-6961-6971-6981-6991.	1180	2.5	.13
Each..D.P. \$0.20	Dozen..D.P. \$2.40		
6962-6972-6982-6992	1181	3.8	.13
Each..D.P. \$0.20	Dozen..D.P. \$2.40		
2604-2616-2624-2625-2631.	1198	2.9	.13
Each..D.P. \$0.20	Dozen..D.P. \$2.40		
2602-2630	1182	2.7	.13
Each..D.P. \$0.20	Dozen..D.P. \$2.40		
6902-6952-6953	1197	2.7	.13
Each..D.P. \$0.20	Dozen..D.P. \$2.40		
6954	1182	2.7	.13
Each..D.P. \$0.20	Dozen..D.P. \$2.40		
4716 (Any 2 $\frac{1}{2}$ x6 inch dry cell may be used— "Gibson Quality" recommended)			
	1451	1.5	.25
Each..D.P. \$0.38	Dozen..D.P. \$3.60		

All flashlight renewal bulbs have unit package quantity of 10.

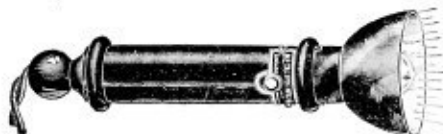


TROUBLE LAMPS

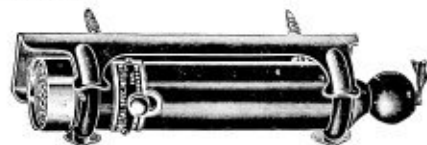
Presto Combination Lamp



No. 200 Combination Presto Cigar Lighter and Lamp. New design, handle of rosewood finish, nickel plated cigar lighter tip and reflector. Polished ivory finish push buttons. Furnished with ten feet of silk cord, complete with regular terminals, each\$3.50
Each..D.P. \$5.44



No. 201 Presto Inspection Lamp. Full reflector, nickel plated, handle of rosewood finish, furnished complete with 6-volt, 4 candle power Tungsten lamp and ten feet of silk cord with regular terminals, each\$2.00
Each..D.P. \$3.11



No. 202 Presto Cigar Lighter with ten feet silk cord, regular terminals and platinum tip, each\$2.50

Presto Cigar Lighter Tips

The heating element ("Tip") of Presto Cigar Lighters is removable so that a new tip can be bought and screwed on in case one should burn out. The heating wire is pure platinum, giving it the necessary lasting quality which cannot be secured in any other kind of wire.

The heating element is protected by a perforated mica covering and the mica is protected by a metal star, thereby insuring long life to the coil. In ordering a tip be sure and order one of same voltage as your battery.

Platinum Cigar Lighter Tips

No. 206 6-volt	\$1.00
Each..D.P. \$1.77	
No. 207 7-volt	1.15
Each..D.P. \$2.04	
No. 208 8-volt	1.35
Each..D.P. \$2.22	
No. 210 10-volt	1.35
Each..D.P. \$2.40	
No. 212 12-volt	1.50
Each..D.P. \$2.06	
No. 214 14-volt	1.75
Each..D.P. \$3.11	
No. 218 18-volt	2.00
Each..D.P. \$3.55	
No. 221 21-volt	2.50
Each..D.P. \$4.44	
No. 224 24-volt	2.50
Each..D.P. \$4.44	
"Ford Special"	1.00
Each..D.P. \$1.77	



No. 220 Holder for cigar lighter, combination cigar lighter and inspection lamp, each\$0.25
Each..D.P. \$0.40

CIGAR LIGHTERS

Presto Automatic Cord Winder



No. 252 Combination Consisting of
No. 240 Cord Winder
No. 202 Cigar Lighter
No. 220 Lighter Holder

For all kinds of Presto Cigar Lighters and Inspection Lamps.
No. 240 Presto Automatic Cord Winder (only), black rubber finish\$2.50
Each..D.P. \$3.88
No. 252 Complete combination, Automatic Cord Winder and Presto Cigar Lighter No. 202 and Holder as illustrated5.00
Each..D.P. \$7.77

Combinations With Automatic Cord Winders

No. 250 Automatic Cord Winder, with No. 200 Presto Combination Cigar Lighter and Lamp and Holder6.00
Each..D.P. \$9.33
No. 251 Automatic Cord Winder, with No. 201 Presto Inspection Lamp and Holder4.50
Each..D.P. \$7.00
No. 253 Automatic Cord Winder, Presto De Luxe Cigar Lighter, complete with lamp and holder7.00
Each..D.P. \$10.88
No. 254 Automatic Cord Winder, Presto Ford Cigar Lighter, complete5.00
Each..D.P. \$7.77
No. 255 Automatic Cord Winder, Presto Star Cigar Lighter, complete5.00
Each..D.P. \$7.77

Ford and Star



No. 204 Presto Ford Cigar Lighter. Designed especially for the Ford Car, get their power direct from the magneto. Equipped with a lighter tip which is especially suited to the Ford Magneto and is marked "Ford Special." Equipped with 10 feet silk cord.

Nickel plated holder is furnished with each cigar lighter, which can be attached anywhere in the car. The cigar lighter case is made of polished wood, ebony finish. All metal parts are heavily nickel plated.

Each\$2.50
Each..D.P. \$3.88

No. 205 Presto Star Cigar Lighter. Constructed exactly like the Presto Ford, except that they are designed to be used on all other makes of cars and are furnished with 6-volt cigar lighter tips unless otherwise specified.

Each\$2.50
Each..D.P. \$3.88

Prices on Cigar Lighters are based on the use of 6-volt tips. If tips of higher voltage are used, an additional price will be charged according to the value of the tip as shown on this page.



LAMPS

Combination Dash and Trouble Lamp



Type "TD" Combined Dash and Trouble Lamp

Type "TD" is primarily a dash lamp, which can, however, be removed from dash socket and be used as a trouble lamp by means of an extension cord. This cord is ten feet long and is fitted with proper fittings for attachment to lamp and socket. By revolving the lamp, it may be turned off or on.

Each \$2.50
Each..D.P. \$3.88

Dash Lamp

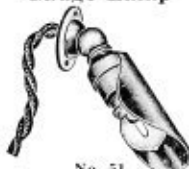
Type "PS" is the neatest dash lamp yet offered, and has the feature of a switch incorporated in it so that the necessity of extra controlling switch and involved wiring is obviated.



Type "PS" Dash Lamp

Each \$1.00
Each..D.P. \$1.66

Gauge Lamp



No. 51

No. 51 Gauge Lamp, Nickeled, Ediswan Fitting, with Bulb, each \$1.50
Each..D.P. \$1.33. Dozen..D.P. \$14.44



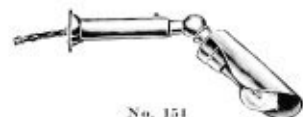
No. 52

No. 52-E Gauge Lamp, Nickeled, Ediswan Fitting, with Bulb, each \$1.75
Each..D.P. \$1.55. Dozen..D.P. \$16.66



No. 53

No. 53-E Gauge Lamp, Nickeled, Ediswan Fitting, with Bulb, each \$1.75
Each..D.P. \$1.55. Dozen..D.P. \$16.66



No. 154

No. 154-E Adjustable Gauge Lamp, Nickeled, Ediswan Fitting, with Bulb, each \$2.00
Each..D.P. \$1.88. Dozen..D.P. \$21.11

Gauge Lamp



No. 57

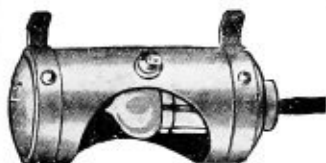
No. 57-E Speedometer Gauge Lamp, Nickeled, Ediswan, with Bulb, each \$2.00
Each..D.P. \$1.66. Dozen..D.P. \$18.00



No. 151

No. 151-C Gauge Lamp with Candelabra Pull Chain Socket, with Bulb, each \$2.25
Each..D.P. \$2.44. Dozen..D.P. \$26.66

Folding Lamp



No. 50

No. 50 Tubular Folding Lamp is designed for use where lamp must be covered and is provided with shutter to protect bulb. Nickeled, with Bulb, each....\$2.25

Each..D.P. \$2.22
Dozen..D.P. \$24.00

No. 152-E Cowl Gauge Lamp, Nickeled, Ediswan Fitting, with Bulb \$1.25

Each..D.P. \$1.33
Dozen..D.P. \$14.44



No. 152

No. 157-E Switch Type Gauge Lamp, Nickeled, Ediswan Fitting, with Bulb \$1.75
Each..D.P. \$2.33
Doz..D.P. \$25.55



No. 157

Cowl Lamp

Width of reflector, 1 1/2 in. Length over all, 4 1/2 in.

This Cowl Lamp is especially designed to be used in the cowl of an automobile, on an angle of 45 degrees.

No. 502 Cowl Lamp Reflector, fitted with Ediswan Socket, Screw, Terminals, Metal Cap, Nickeled, each \$1.75
Each..D.P. \$1.44. Dozen..D.P. \$15.55





LAMPS

Trouble Lamps



No. 20 Trouble Lamp, handle, guard, 6 volt, 4 c. p. lamp, 10 feet cotton cord, copper terminals, each \$1.00
Each...D.P. \$1.22 Dozen...D.P. \$13.33



No. 22 Trouble Lamp, brass, handle, socket and guard, 6 volt, 4 c. p. lamp, 10 feet silk cord, copper terminals, each \$1.25
Each...D.P. \$1.66 Dozen...D.P. \$18.00



No. 24 Trouble Lamp, black ebony handle, polished nicked socket and guard, 6 volt, 4 c. p. lamp, 10 feet silk cord, twin copper terminals, each \$1.50
Each...D.P. \$1.66 Dozen...D.P. \$18.00

Connecticut Trouble Lamps



Types R W and S W

Type R W Connecticut Trouble Lamp made in a substantial and neat manner with solid brass reflector, nicked and polished, with protecting wire

guard, so arranged that it can be collapsed for removal or insertion of lamp. Has rubberoid handle and 10 feet black rubber covered duplex cable with Edison attachment plug to fit standard sockets.

Type R W Trouble Lamp, Double Contact, each...\$1.75
Each...D.P. \$2.44

Type S W Trouble Lamp, Single Contact, each... 1.75
Each...D.P. \$2.44

Type R G Connecticut Trouble Lamp made with solid brass reflector, nicked and polished, and a high grade imported lens. Rubberoid handle and 10 feet black rubber



Types R G and S G

covered duplex cord with an outer braid and filler, fitted with Edison capped plug and lamp. The cap carrying lens can be removed by prying off with a dime.

Type R G Trouble Lamp, Double Contact, each...\$2.25
Each...D.P. \$3.66

Type S G Trouble Lamp, Single Contact, each... 2.25
Each...D.P. \$3.66

Trouble Lamps



Nos. 281 and 282

No. 281 Trouble Lamp, full reflector, 3-inch diameter, nickel-plated, highly polished, 10 feet black cotton cord, regular battery terminals, Bayonet lamp socket and 6-volt, 2-c. p. Tungsten bulb...\$1.00
Each...D.P. \$1.54

No. 282 Trouble Lamp, same as No. 281, but fitted with either single or double contact Bayonet plug... 1.35
Each...D.P. \$1.95

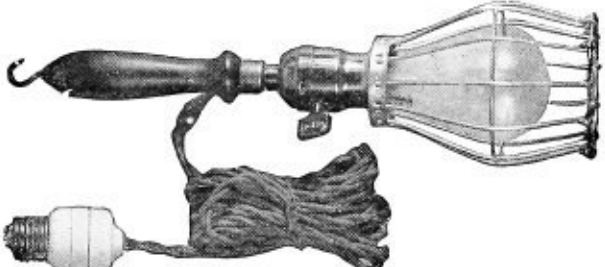


Nos. 286 and 287

No. 286 Trouble Lamp, full reflector, nickel-plated, highly polished, 3-inch lens for reading street signs and house numbers from the car, complete with 10 feet black cotton cord, regular battery terminals, with Bayonet lamp socket and 6-volt, 4-c. p. Tungsten bulb... 1.35
Each...D.P. \$1.95

No. 287 Trouble Lamp, same as No. 286, but fitted with either single or double contact Bayonet plug... 1.50
Each...D.P. \$2.33

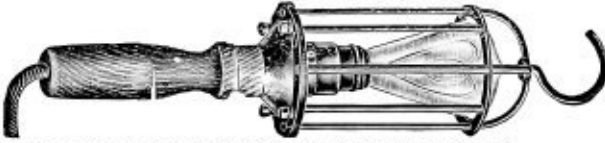
No. 72 110-Volt Garage Lamp



Many of the most disastrous fires have been caused by dropping incandescent lamps and igniting gasoline on garage floors. The importance of properly guarding extension lamps is frequently overlooked.

Price complete, ready for use, as shown, each...\$1.50
Each...D.P. \$2.33

No. 172 Extra Heavy Garage Lamp



Complete with 110-volt bulb, 15 feet reinforced cord and detachable plug, price, each...\$2.50
Each...D.P. \$3.88

Lamp Guards

No. C Lamp Guard, 16 c. p., each...\$0.20
Dozen...D.P. \$2.66
No. C Lamp Guard, 32 c. p., each... .30
Dozen...D.P. \$3.11
No. 346 Lamp Guard, 16 c. p., each... .50
Dozen...D.P. \$6.66
No. 346 Lamp Guard, 32 c. p., each... .60
Dozen...D.P. \$8.00



PREST-O-LITE GAS TANKS

For Automobiles, Motorcycles, Motor and
Sail Boats



"A" Prest-O-Lite Gas Tank, each.....\$25.00
Each..D.P. \$41.11

Contains 70 cubic feet of gas, 22 inches long, 7 1/2 inches in diameter.

Using 2 1/4-foot burners.....70 hours lighting
Using 2 3/4-foot burners.....56 hours lighting
Using 2 1/2-foot burners.....46.6 hours lighting
Exchanges.....\$2.50

Each..D.P. \$4.41



"B" Prest-O-Lite Gas Tank, each.....\$18.00
Each..D.P. \$32.22

Contains 40 cubic feet of gas, 20 inches long, 6 inches in diameter.

Using 2 1/4-foot burners.....40 hours lighting
Using 2 3/4-foot burners.....32 hours lighting
Using 2 1/2-foot burners.....26 hours lighting
Exchanges.....\$1.50

Each..D.P. \$2.77



"E" Prest-O-Lite Gas Tank, each.....\$15.00
Each..D.P. \$25.55

Contains 30 cubic feet of gas, 16 inches long, 6 inches in diameter.

Using 2 1/4-foot burners.....60 hours lighting
Using 2 1/2-foot burners.....30 hours lighting
Exchanges.....\$1.25

Each..D.P. \$2.22



"M" (Motorcycle) Prest-O-Lite Gas Tank, each..\$10.00
Each..D.P. \$15.55

Contains 10 cubic feet of gas, 12 inches long, 4 inches in diameter.

Using 1 1/4-foot burner.....40 hours lighting
Exchanges.....\$0.50

Each..D.P. \$1.00

PREST-O-LITE ACCESSORIES

Tank Bands



No. 3 Quick Detachable Gas Tank Bands, for B or E tanks, per pair.....\$1.00
Per Pair..D.P. \$0.88

No. 3 Quick Detachable Gas Tank Bands, for A tanks, per pair.....1.25
Per Pair..D.P. \$1.11



No. 4 Flat Gas Tank Bands, for B or E tanks, per pair.....\$1.00
Per Pair..D.P. \$0.88

No. 4 Flat Gas Tank Bands, for A tanks, per pair..1.25
Per Pair..D.P. \$1.11

F. G. Gas Tank Bands



Tank can be fastened to the side of car, running-board or on the rear, or suspended anywhere.

Almost a necessity on roadsters where running-board space is limited; and an improvement and convenience on any car.

Made of malleable steel, and so constructed that tank is securely held in place by a screw clamping a spring over the tank beyond the center.

Neat, quickly detached, secure and classy.

Price, black enameled, per pair.....\$1.00
Per Pair..D.P. \$0.88

Prest-O-Lite Regulating Valve



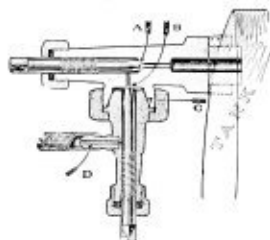
Eliminates adjustment of flame at needle valve, for all Prest-O-Lite tanks.

Prest-O-Lite Regulating Valve, each.....\$1.00
Each..D.P. \$1.76



PREST-O-LITE ACCESSORIES

Regulating Valve



The Imperial Tite-nut Acetylene Regulating Valve prevents the only tank leakage for which the consumer is responsible.

It reduces the pressure at the union connecting the Regulating Valve with the main valve on the tank, from 250 lbs. to 2 ounces.

It insures a bright, steady light. It guards against any adjustments which result in flare-ups that might break the reflectors, causing an expense of several dollars.

It insures the best and safest light. Anybody can handle a light equipped with it.

Each\$1.00

Each..D.P. \$1.66 Per Dozen..D.P. \$18.66

Prest-O-Lite Union



Prest-O-Lite Union, each.....\$0.15

Per Dozen..D.P. \$2.66

Gas Tank Key



No. 3 Regular Gas Tank Key, each.....\$0.05

Per Dozen..D.P. \$0.53 Per 100..D.P. \$2.77



No. 10 Gas Tank Key, each.....\$0.10

Per Dozen..D.P. \$0.80 Per 100..D.P. \$4.44

GENERATOR TUBING

Rubber Generating Tubing



Pure Gum Generator Tubing, 3/16x1/16 wall, packed 50 feet in box, per foot.....\$0.10
Per foot..D.P. \$0.09
In 50-ft. Rolls, per foot.....D.P. \$0.08

Pure Gum Generator Tubing, 1/16x1/16 wall, packed 50 feet in box, per foot......12
Per foot..D.P. \$0.11
In 50-ft. Rolls, per foot....D.P. \$0.09

Pure Gum Generator Tubing, 3/16x1/8 wall, packed 50 feet in box, per foot......16
Per foot..D.P. \$0.15 In 50-ft. Rolls, per foot..D.P. \$0.13

Pure Gum Generator Tubing, 7/32x1/8 wall, packed 50 feet in box, per foot......17
Per foot..D.P. \$0.18 In 50-ft. Rolls, per foot..D.P. \$0.16

Pure Gum Generator Tubing, 1/2x1/8 wall, packed 50 feet in box, per foot......18
Per foot..D.P. \$0.20 In 50-ft. Rolls, per foot..D.P. \$0.18

Braidoid Gas Tubing



A single ply tubing of braided construction, designed especially for automobiles. Surrounding the tube, which is selected stock and guaranteed to withstand the action of all gases, is closely braided (not wrapped) a cover constructed of very strong, light thread. The outside cover and inner tubes are made of stocks guaranteed not to dry out or crack in any climate. Cured under pressure.

An ideal tubing for gas lamp connections and gas tanks. No nipples or rolled ends necessary. Will last for years. Practically indestructible. Very flexible. Will not kink or crack.

Braidoid Gas Tubing, 3/16, packed 50 feet in box, per foot..\$0.12
Per foot..D.P. \$0.15 In 50-ft. Rolls, per foot..D.P. \$0.14

Braidoid Gas Tubing, 1/2, packed 50 feet in box, per foot....15
Per foot..D.P. \$0.17 In 50-ft. Rolls, per foot..D.P. \$0.16

Copper Tubing



Made of annealed, seamless tubing. Can be bent in any direction without fear of breaking. Cut to any length.

Copper Tubing, 1-inch outside diameter, per foot.....\$0.15
Per foot..D.P. \$0.09 In 100-ft. lots..D.P. \$7.77

Copper Tubing, 3/16-inch outside diameter, per foot......12
Per foot..D.P. \$0.11 In 100-ft. lots..D.P. \$9.55

Copper Tubing, 1-inch outside diameter, per foot......12
Per foot..D.P. \$0.13 In 100-ft. lots..D.P. \$11.10

Copper Tubing, 5/16-inch outside diameter, price, per foot..15
Per foot..D.P. \$0.15 In 100-ft. lots..D.P. \$13.32

Copper Tubing, 2-inch outside diameter, price, per foot...20
Per foot..D.P. \$0.18 In 100-ft. lots..D.P. \$15.55

Brass Tubing

Soft drawn seamless brass tubing for gas lines; also suitable for oil and gasoline.



Brass Tubing, 1-inch outside diameter, per foot.....\$0.14
Per foot..D.P. \$0.13 In 100-ft. lots..D.P. \$11.10



LAMP BURNERS

Gibson Quality Burner

This burner, while low in price, will give good service. Fitted with inner screen; furnished in $\frac{1}{2}$, $\frac{3}{4}$ or 1 foot size.

Each \$0.20
Doz. D.P. \$1.33
Gross. D.P. \$13.33



Crescent Victory Burners

Crescent Victory Burners are made of German Lava by American labor of highest skill; $\frac{1}{2}$, $\frac{3}{4}$ and 1 foot. Specify size desired.

Crescent Victory Burners with knurled pillar; each \$0.25
Dozen. D.P. \$3.33
Gross. D.P. \$33.33

Crescent Victory Burners with hex pillar; each \$0.25
Dozen. D.P. \$3.88 Gross. D.P. \$40.00



Von Schwarz "Perfection"

Perfection Burners are the acknowledged standard of merit; the burner with a world-wide reputation; $\frac{1}{2}$, $\frac{3}{4}$ and 1 foot. Specify size desired.

Von Schwarz Perfection Burners with knurled pillar; each \$0.35
Dozen. D.P. \$5.55
Gross. D.P. \$60.00

Von Schwarz Perfection Burners with hexapost; each \$0.35
Dozen. D.P. \$5.55 Gross. D.P. \$60.00



Von Schwarz "Koro"

A single jet slot burner which has no equal.

Von Schwarz Koro Burners; each \$0.25

A highly satisfactory metal arm burner; guaranteed.

Dozen. D.P. \$3.33
Gross. D.P. \$33.33

Von Schwarz Mator Burners; each \$0.25
 $\frac{1}{2}$, $\frac{3}{4}$ and 1 foot.

Specify size desired.
Dozen. D.P. \$3.33
Gross. D.P. \$33.33



REFLECTORS

French or Bent Glass Mirror Reflectors



French Mirrors, 4 $\frac{1}{2}$ -inch, each	.....	\$0.45
Each. D.P. \$0.48	Dozen. D.P. \$5.33	
French Mirrors, 5-inch, each	.....	.50
Each. D.P. \$0.55	Dozen. D.P. \$6.60	
French Mirrors, 5 $\frac{1}{2}$ -inch, each	.....	.55
Each. D.P. \$0.60	Dozen. D.P. \$6.60	
French Mirrors, 6-inch, each	.....	.60
Each. D.P. \$0.66	Dozen. D.P. \$7.92	
French Mirrors, 6 $\frac{1}{2}$ -inch, each	.....	.65
Each. D.P. \$0.66	Dozen. D.P. \$7.92	
French Mirrors, 7-inch, each	.....	.70
Each. D.P. \$0.88	Dozen. D.P. \$10.56	
French Mirrors, 7 $\frac{1}{2}$ -inch, each	.....	.75
Each. D.P. \$1.00	Dozen. D.P. \$12.00	
French Mirrors, 8-inch, each	.....	.90
Each. D.P. \$1.11	Dozen. D.P. \$13.32	
French Mirrors, 9-inch, each	.....	1.30
Each. D.P. \$1.32	Dozen. D.P. \$15.84	

Mangin Mirror Reflectors

Mangin Mirror Lenses, 4-inch, each	.....	\$0.50
Each. D.P. \$1.00	Dozen. D.P. \$11.00	
Mangin Mirror Lenses, 4 $\frac{1}{2}$ -inch, each	.....	.95
Each. D.P. \$1.11	Dozen. D.P. \$13.32	
Mangin Mirror Lenses, 5-inch, each	.....	1.00
Each. D.P. \$1.15	Dozen. D.P. \$13.80	
Mangin Mirror Lenses, 5 $\frac{1}{2}$ -inch, each	.....	1.30
Each. D.P. \$1.32	Dozen. D.P. \$15.84	
Mangin Mirror Lenses, 6-inch, each	.....	1.30
Each. D.P. \$1.32	Dozen. D.P. \$15.84	
Mangin Mirror Lenses, 6 $\frac{1}{2}$ -inch, each	.....	1.50
Each. D.P. \$1.44	Dozen. D.P. \$17.28	
Mangin Mirror Lenses, 7-inch, each	.....	1.90
Each. D.P. \$1.88	Dozen. D.P. \$22.56	
Mangin Mirror Lenses, 7 $\frac{1}{2}$ -inch, each	.....	2.25
Each. D.P. \$2.22	Dozen. D.P. \$26.64	
Mangin Mirror Lenses, 8-inch, each	.....	2.75
Each. D.P. \$3.11	Dozen. D.P. \$37.32	
Mangin Mirror Lenses, 8 $\frac{1}{2}$ -inch, each	.....	3.25
Each. D.P. \$3.55	Dozen. D.P. \$42.60	
Mangin Mirror Lenses, 9-inch, each	.....	4.50
Each. D.P. \$5.55	Dozen. D.P. \$66.60	



Lancaster Mounted Mangin Mirror Lens



The Improved Easy Way Mounting consists of a high grade Mangin Mirror Lens with a spun metal covering, provided with a tapped and threaded holding screw (part 1), a reflector holding nut (part 2), and a lock screw (part 3).

To install, make a $\frac{3}{8}$ -inch hole at center through back of lamp, insert part 2 through same, place part 1 in lamp and screw into part 2 until tight, then turn in lock screw, part 3, and the job is complete and thoroughly reliable.

This device is designed for convenience in localities where the services of lamp repairers are not obtainable.

Mounted Mangin Mirror, 5 $\frac{1}{2}$ extreme diameter, contains 5-inch Mangin Mirror	.....	\$2.00
Each. D.P. \$2.22	Dozen. D.P. \$26.64	
Mounted Mangin Mirror, 6 $\frac{1}{2}$ extreme diameter, contains 6-inch Mangin Mirror	.....	2.50
Each. D.P. \$2.77	Dozen. D.P. \$33.24	
Mounted Mangin Mirror, 7 $\frac{1}{2}$ extreme diameter, contains 7-inch Mangin Mirror	.....	3.50
Each. D.P. \$3.88	Dozen. D.P. \$46.56	



LAMP BRACKETS

Side and Tail Light Brackets

No. 1917. Nickel,
each\$0.60
Each..D.P. \$0.88

No. 1910. Nickel,
each\$0.50
Each..D.P. \$0.77

No. 1950. Nickel,
each\$0.50
Each..D.P. \$0.77

No. 1967. Nickel,
each\$0.75
Each..D.P. \$1.11



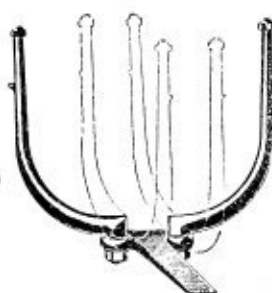
No. 1925. Nickel,
each\$0.90
Each..D.P. \$1.32



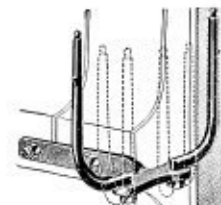
No. 1965. Nickel,
each\$0.85
Each..D.P. \$1.32

Head Light Brackets

No. 320. Adjustable
Lamp Bracket; mal-
leable iron, japan-
ned finish, per pair \$2.00
Per pair..D.P. \$1.88



No. 321. Adjustable Lamp
Bracket, malleable iron,
japaned finish, per
pair\$2.00
Per pair..D.P. \$1.88



No. 323. Adjustable
Lamp Bracket, mal-
leable iron, japan-
ned finish, per pair \$2.50
Per pair..D.P. \$1.88



LAMP ACCESSORIES

Calcium Carbide

2-lb. Cans, 1-in. Carbide,
each\$0.25
Each..D.P. \$0.35

Per case, containing 24 2-lb.
cans4.80
Per case..D.P. \$8.00

10-lb. Cans, 1/2 or 1-in. Car-
bide, each90
Each..D.P. \$1.55

Per case, containing 6 10-lb.
cans5.10
Per case..D.P. \$8.66

100-lb. Drums, size 1 1/4 x 3 1/2... 6.00
Each..D.P. \$7.77



Economy Burner Cleaner



High grade burner cleaner. Carefully made.
Price, each\$0.10
Dozen..D.P. \$1.06

Lamp Wicks



These are the finest
wicks for use in oil
lamps; are very
closely woven and
are made in all sizes.

Lamp Wick, 1/2 or 3/4 inch, per doz.....\$0.20
Dozen..D.P. \$0.22

Lamp Glasses

For Automobile Lamps



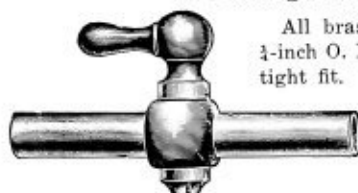
We can furnish front
glasses any size. In or-
dering, state diameter re-
quired, not name of lamp.

Lamp Glasses, 3 -inch, each.....	D.P. \$0.15
Lamp Glasses, 3 1/2 -inch, each.....	D.P. .15
Lamp Glasses, 4 -inch, each.....	D.P. .15
Lamp Glasses, 4 1/2 -inch, each.....	D.P. .15
Lamp Glasses, 5 -inch, each.....	D.P. .15
Lamp Glasses, 5 1/2 -inch, each.....	D.P. .15
Lamp Glasses, 6 -inch, each.....	D.P. .20
Lamp Glasses, 6 1/2 -inch, each.....	D.P. .20
Lamp Glasses, 7 -inch, each.....	D.P. .25
Lamp Glasses, 7 1/2 -inch, each.....	D.P. .25
Lamp Glasses, 8 -inch, each.....	D.P. .25
Lamp Glasses, 8 1/2 -inch, each.....	D.P. .25
Lamp Glasses, 9 -inch, each.....	D.P. .25
Lamp Glasses, 10 -inch, each.....	D.P. .30



GAS TUBING

Gas Tubing Cock No. 1



All brass ends reamed to fit 1/4-inch O. D. tubing. Makes gas-tight fit.

Price, each . . . \$0.25
Doz., D.P. \$4.00

Rubber Lamp Connection

A connection for attaching lamp to copper tubing.

Made of fine Para Gum. Both ends are equipped with heavy molded nipples. This makes the connection so strong that it will not deteriorate by frequent attaching or detaching.

Price, each . . . \$0.20
Dozen . . . D.P. \$2.22 Gross . . . D.P. \$23.33

Flexible Lamp Connection



Made of 1/4-inch polished brass with rubber ends to fit lamp and pipe connection.

Not only adds to the appearance of the car but will last many years, thereby eliminating the usual trouble of rubber hose.

Cannot become porous and therefore saves gas.

Flexible Lamp Connections, brass, each \$0.25
Doz. . . D.P. \$3.33

Flexible Lamp Connections, nickel, each . . . \$0.30
Dozen . . . D.P. \$4.00

Gas Bags

Gas Bags, each . . . \$0.25
Dozen . . . D.P. \$4.00



Gas Tubing Nipples

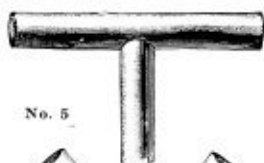


No. 17

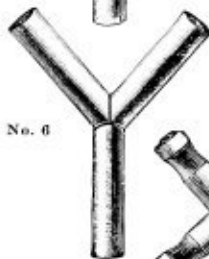


No. 15

Gas Tubing Nipples



No. 5



No. 6



No. 3



No. 2



No. 4



No. 1



No. 9



No. 16

No. 1	Gas Tubing Nipples, per dozen	D.P. \$0.54
No. 2	Gas Tubing Nipples, per dozen	D.P. .80
No. 3	Gas Tubing Nipples, per dozen	D.P. 1.11
No. 4	Gas Tubing Nipples, per dozen	D.P. .80
No. 5	Gas Tubing Nipples, per dozen	D.P. 1.33
No. 6	Gas Tubing Nipples, per dozen	D.P. 1.33
No. 9	Gas Tubing Nipples, per dozen	D.P. 3.88
No. 15	Gas Tubing Nipples, per dozen	D.P. 1.88
No. 16	Gas Tubing Nipples, per dozen	D.P. 3.88
No. 17	Gas Tubing Nipples, per dozen	D.P. 3.88

Nos. 1, 2, 3 and 4 are made of solid brass castings and are about 1/4 inch in diameter, and are for rubber tubing with 1/8-inch hole.

Nos. 5 and 6 are made from smooth brass and will fit 1/4-inch brass or copper tubing.

No. 9 Brass Unions turned from solid heavy brass. One end threaded regular 1/4-inch gas pipe thread. Other end drilled 1/4-inch hole to take 1/4-inch O. D. tubing. Ground taper joint.

Unions Nos. 15, 16 and 17 are made from tubing, are brazed so that tubing can be soldered in without any injury to the unions. Are 1/4 inch inside diameter to take 1/4-inch outside diameter tubing. Ground taper joint.



TUBE EXTENSIONS

Anchor Edi-Swan Plug Extensions



No. 51

This cut shows the flexible brass tube extension used in connection with all standard Edi-Swan and Anchor types of connectors. They are made in three standard sizes. Furnished in brass, white nickel or black nickel.

Prices
List Each

No. 51—10 inches over all, with $\frac{1}{8}$ inch plugs.....\$1.15
Each..D.P. \$1.33 Dozen..D.P. \$14.44

No. 51—13 inches over all, with $\frac{1}{8}$ inch plugs..... 1.25
Each..D.P. \$1.44 Dozen..D.P. \$16.00

No. 51—16 inches over all, with $\frac{1}{8}$ inch plugs..... 1.35
Each..D.P. \$1.55 Dozen..D.P. \$17.33



No. 52

This cut shows the duplex flexible cable with Anchor Edi-Swan type Plugs on each end, for extensions with all standard Edi-Swan type Connectors. They are made in three standard sizes. Furnished in white nickel, black nickel or brass.

Prices
List Each

No. 52—10 inches over all, with $\frac{1}{8}$ inch plugs.....\$.85
Each..D.P. \$1.00 Dozen..D.P. \$10.66

No. 52—13 inches over all, with $\frac{1}{8}$ inch plugs..... .90
Each..D.P. \$1.11 Dozen..D.P. \$12.00

No. 52—16 inches over all, with $\frac{1}{8}$ inch plugs..... .95
Each..D.P. \$1.22 Dozen..D.P. \$13.33

Sockets



No. 20. Anchor Edi-Swan Lamp Socket, Nickel Plated Tube with 10-inch wires, each.....\$.34
Each..D.P. \$.28 Dozen..D.P. \$3.11



No. 82. Anchor Edi-Swan Lamp Socket with Nickel Plated Metal Cap and 10 inch wires, each.....\$.60
Each..D.P. \$.55 Dozen..D.P. \$6.00

ADAPTERS

For Gas or Oil Burners



No. 301. Style A for Oil Burner

No. 301 Style "A" Gil-Bo Adapter for Oil Burner with Fiber Candelabra Socket and ten inches weatherproof cord, each.....\$ 0.30
Each..D.P. \$.44 Dozen..D.P. \$4.00

No. 302 Style "A" Gil-Bo Adapter for Oil Burner with Edi-Swan Lamp Socket and ten inches weatherproof cord, each..... .60
Each..D.P. \$.77 Dozen..D.P. \$8.00



No. 304. Style B for Gas Burner

No. 303 Style "B" Gil-Bo Adapter for Gas Burner with Fiber Candelabra Socket and ten inches weatherproof cord, each.....\$.30
Each..D.P. \$.44 Dozen..D.P. \$4.00

No. 304 Style "B" Gil-Bo Adapter for Gas Burner with Edi-Swan Socket and ten inches weatherproof cord, each..... .60
Each..D.P. \$.77 Dozen..D.P. \$8.00

Electric Adapters

Candelabra to Edi-Swan



310

Min. to Cand.



312

No. 310 Candelabra to Edi-Swan Adapter.....\$.20
Each..D.P. \$.22 Dozen..D.P. \$2.22

No. 312 Miniature to Candelabra Adapter..... .06
Each..D.P. \$.07 Dozen..D.P. \$.66



HOSE

Water Hose



Water Hose $\frac{1}{2}$ inch supplied in any length desired.
Per foot \$0.30
Per foot, D.P. \$0.26

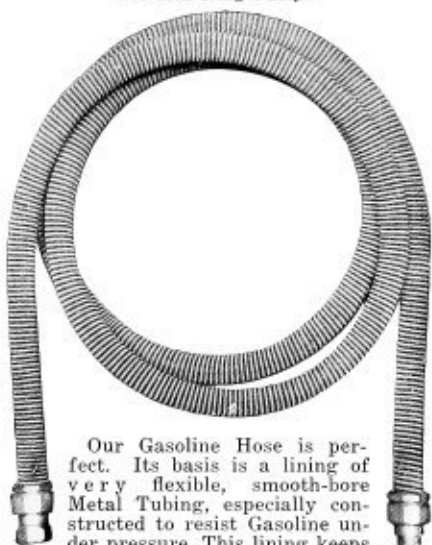
Flexible Steel Lined Gasoline Hose



Gasoline Hose that will stand gasoline. Few articles produced by the rubber manufacturer's art give more concern and trouble than a suitable material for conveying gasoline. We offer this with the assertion that it is the best of its kind. It is constructed with a flexible steel lining, covered by high grade rubber. Supplied in ten foot lengths complete with couplings.
Each \$8.00
Each, D.P. \$8.88

Metal Gasoline Hose

For Measuring Pumps



Our Gasoline Hose is perfect. Its basis is a lining of very flexible, smooth-bore Metal Tubing, especially constructed to resist Gasoline under pressure. This lining keeps the Gasoline from coming in contact with the Rubber Tube that is vulcanized over it, and a heavy, woven cotton cover over the Rubber protects it on the outside.

Metal Gasoline Hose, complete with couplings, 8-foot lengths, each \$15.00
Each, D.P. \$24.44

Metal Gasoline Hose, complete with couplings, 10-foot lengths, each 17.50
Each, D.P. \$30.00

Metal Gasoline Hose, complete with couplings, 12-foot lengths, each 20.00
Each, D.P. \$33.33

Nozzle is not included in price but can be supplied when wanted at \$7.00 extra.
Each, D.P. \$10.00

GASOLINE SYSTEM

Stewart Vacuum Gasoline System

The Stewart Vacuum Gasoline System comprises a small, round tank, mounted on engine side of dash. This tank is divided into two chambers, upper and lower. The upper chamber is connected to the intake manifold, while another pipe connects it with the main gasoline supply tank. The lower chamber is connected with the carburetor.

The intake strokes of the motor create a vacuum in the upper chamber of the tank, and this vacuum draws gasoline from the supply tank.

As the gasoline flows into this upper chamber, it raises a float valve. When this float valve reaches a certain height it automatically shuts off the vacuum valve, and opens an atmospheric valve, which lets the gasoline flow down into the lower chamber. The float valve in the upper chamber drops with the gasoline flowing out, and when it reaches a certain point it in turn reopens the vacuum valve and the process of refilling the upper chamber begins again. The same processes are repeated continuously, and absolutely automatically.

The lower chamber is always open to the atmosphere, so that the gasoline flows to the carburetor, as required, uninterruptedly and with an even pressure.

Does away with all need of pressure—eliminates power-pressure pumps, hand-pressure pumps, air gauge on dash, extra line of piping to rear tank, gasoline filter, and all labor of installing all this equipment—does not require air-tight supply tank, nor air-tight filler caps.

Does away with trouble of trying to keep air pressure in supply tank—trying to overcome leaks in connections—necessity of always tightening down filler cap—for with this system it doesn't matter if filler cap is left off entirely, it works just as well—car starts instantaneously—no need of laborious pumping pressure in the tank by hand.

The carburetor may be placed high on the motor where it is easily accessible, and where heat of motor greatly assists carburetion.

Tank is located under hood on front side of dash—out of the way—heat of engine warms gasoline and assists carburetion.

Lower chamber of tank is constructed as a filter, and prevents any water or sediment in gasoline from passing into carburetor. A plug in bottom of tank permits drawing off this water, and also allows you to draw gasoline, if required for priming or cleaning purposes.

Supply tank can also be placed in advantageous position in rear of car, permitting car manufacturers to design body as low as style and requirements demand—puts weight where it is carried to best advantage to the riding qualities of the car.

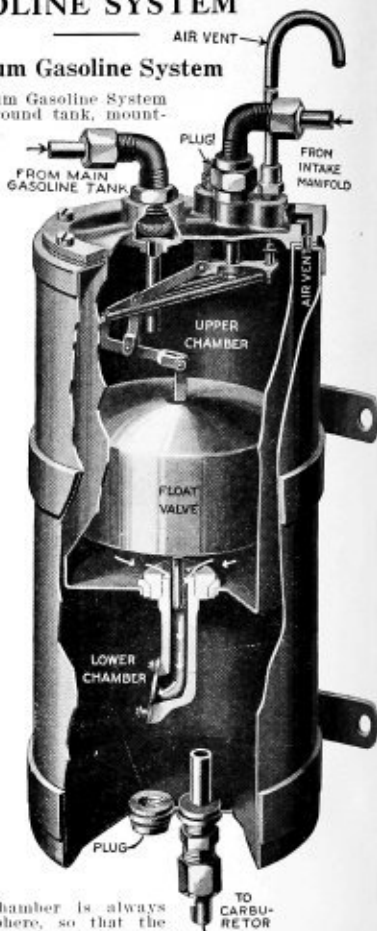
Does away with gasoline tank in Cowl, where they have been found to be noisy—giving off annoying odors—troublesome to fill, dangerous in collision, and hazardous from possible explosions through leakage of gasoline to ignition wires.

This system makes climbing the steepest grades as easy as running on the level.

This Stewart Vacuum Gasoline System can be installed on any car, whether old or new, by any garage man.

In ordering be sure and specify name and model of car on which tank is to be used.

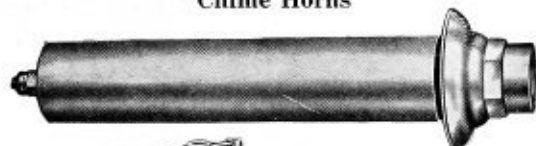
Each \$10.00
Each, D.P. \$14.80





CHIME HORNS

Chime Horns



No. 10

The Chime Horn has four harmonious tones combined in one loud warning blast that guarantees the right of way.

It is made entirely of brass of good quality, which will not permit rust or corrosion to interfere with its tone or operation. In fact, it cannot get out of order.

No. 10 Horn complete with 1-inch to 1½-inch valve and pedal, each\$5.00

Each..D.P. \$5.33 Per Dozen..D.P. \$60.00

No. 110 Horn complete with 1½-inch to 2½-inch valve and pedal, each 6.00

Each..D.P. \$5.77 Per Dozen..D.P. \$66.66

No. 210 Horn complete with 2½-inch to 3-inch valve and pedal, each 7.00

Each..D.P. \$6.66 Per Dozen..D.P. \$73.33

Chime Horn Only



No. 12

This horn is the same as the one described above, and is sold single, without valve or pedal, if desired. Size of this horn is—length, 12½ inches; bell or tube, diameter, 2 inches; receiver, diameter, 3¼ inches.

No. 12 Horn only, each\$3.50

Each..D.P. \$3.33 Per Dozen..D.P. \$40.00

Jumbo "Husk" Chime Horn



No. 15

This 4-tone horn is made same size as our 1908 and 1909 "Husk" Horns. It supplies the demand for a horn of large volume and is improved in its construction same as our smaller horn above. No horn on the market offers its equal in value. It is sold with valve and pedal, or single, if desired.

Size of horn—length, 15 inches; bell, diameter, 2½ inches; receiver, diameter, 3½ inches.

No. 15 Jumbo Horn only, each\$4.50

Each..D.P. \$4.44 Per Dozen..D.P. \$50.00

No. 115 Jumbo Horn with 1-inch to 1½-inch valve and pedal, each 6.50

Each..D.P. \$6.66 Per Dozen..D.P. \$73.33

Jumbo "Husk" Chime Horn—Continued

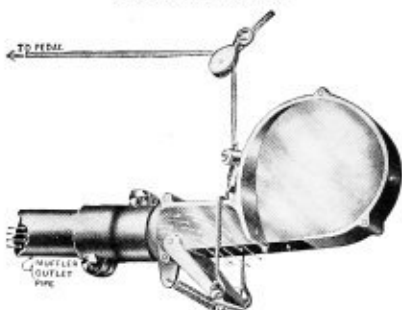
No. 215 Jumbo Horn with 1½-inch to 2½-inch valve and pedal, each\$7.00

Each..D.P. \$7.22 Per Dozen..D.P. \$80.00

No. 315 Jumbo Horn with 2½-inch to 3-inch valve and pedal, each 7.50

Each..D.P. \$7.77 Per Dozen..D.P. \$86.66

Jericho Horns



Jericho the Perfect Motor Signal

The Jericho Horn is designed for attachment to the rear of the muffler. Pressing a pedal closes the trap lid, compelling the exhaust to enter the horn chamber. The warning is distinctive and road clearing, without being harsh or disagreeable.

No. 0 Jericho Horn, for 10 to 20 H. P., each\$5.00

Each..D.P. \$7.77

No. 1 Jericho Horn, for 20 to 30 H. P., each 6.00

Each..D.P. \$8.88

No. 2 Jericho Horn, for 30 to 40 H. P., each 6.00

Each..D.P. \$8.88

No. 3 Jericho Horn, for 40 to 50 H. P., each 7.00

Each..D.P. \$10.00

Price includes solid brass pedal, cable pulley and attaching coupling.

In ordering Jericho Horns be sure to give name and model of cars on which they are to be used, so proper couplings can be supplied.

Jubilee Horns



Jubilee Chime Tone Horn

No. 31 Jubilee Horn, for cars 10 to 20 H. P., each\$6.00

Each..D.P. \$6.66

No. 32 Jubilee Horn, for cars 20 to 30 H. P., each 6.00

Each..D.P. \$6.66

No. 33 Jubilee Horn, for cars 30 to 40 H. P., each 7.00

Each..D.P. \$7.77

No. 34 Jubilee Horn, for cars 40 to 50 H. P., each 8.00

Each..D.P. \$8.88

In ordering Jubilee Horns, be sure to give name and model of cars on which they are to be used, so proper couplings can be supplied.



CLOCKS

One and Eight-Day Clocks



Auto No. 1

No. 1 Auto Clock. A thoroughly tried and tested One-Day Clock. A neat, simple case in which no screws are visible, made from heavy stock and with an additional inner casing of brass to thoroughly protect the movement. Made by the latest automatic machinery and not affected by jar or vibration. Measures 3½ inches in height and has 2½-inch dial with second hand. Finished in black with nickel Bezel.

Each\$2.50
Each..D.P. \$3.11 Dozen..D.P. \$33.33



Auto No. 2

No. 2 Auto Clock. A new carefully constructed Eight-Day Clock sold at a reasonable figure. Made in the latest model with every up-to-date feature, convenient to use, with outside wind and set. This clock may also be regulated from the front without removing the movement. The case, made from heavy brass stock, protects a thoroughly tested high grade movement. It is 4 inches high and has a 2½-inch ivory dial. Thoroughly dust and jar proof. Finished in black with nickel Bezel.

Each\$4.25
Each..D.P. \$5.00 Dozen..D.P. \$56.66

One and Eight-Day Clocks



Auto No. 3 Cowl

No. 3 Auto Clock. Latest model of Eight-Day Cowl Dash Clock. New catch securing the movement. These clocks are designed to be sunk into the dash and make a very neat appearance. They have a new spring catch (patent applied for) which holds the movement firmly in position. The face of the clock lies very close to the dash as no part need project for winding purposes. It has a standard, reliable movement which has been thoroughly tested in the Auto No. 2 case, and is protected from injury by a nickel plated brass cap. The clock measures 3½ inches from rim to rim with 2½-inch dial, and is 3 inches deep. Highly polished nickel finish.

Each\$4.25
Each..D.P. \$5.00 Dozen..D.P. \$56.66



Auto No. 4 Cowl

No. 4 Auto Clock. Latest model of One-Day Cowl Dash Clock. New catch securing the movement. These clocks are the same in every respect as the Auto No. 3, having the same high grade appearance and special catch, except that they contain a one-day movement. The face of the clock has a remarkably clean-cut appearance and lies very close to the dash as only the rim and bezel of the clock appear above the surface. The movement is a reliable one, being the same as used in the Auto No. 1 and has given general satisfaction. The clock measures 3½ inches from rim to rim with 2½-inch dial and is 2 inches deep. Highly polished nickel finish.

Each\$3.00
Each..D.P. \$3.88 Dozen..D.P. \$42.66



CLOCKS

New Ormond Clock



Height 4 inches, width 4 inches; dial porcelain, 3 inches; movement, fine quick-beat 8-day time piece.

New Ormond Clock, Brass	\$7.00
New Ormond Clock, Nickel	7.00
New Ormond Clock, Black and Nickel	7.00
New Ormond Clock, Black	7.00
Each..D.P.	\$8.33

Westbury Clock



Height 4½ inches, width 4 inches; dial porcelain, 3 inches; movement, fine quick-beat 8-day time piece with second hand.

Westbury Clock, Brass	\$7.50
Westbury Clock, Nickel	7.50
Westbury Clock, Black and Nickel	7.50
Westbury Clock, Black	7.50
Each..D.P.	\$8.33

Cowl Clock



Diameter 3½ inches. Dial, Silver 2½ inches.

Case—Heavy brass with flange to fit flush in cowl. Eight-day time piece with second hand.

New Haven Cowl Clock, Nickel Finish, each	\$8.00
Each..D.P.	\$10.00

Phinney-Walker Keyless Clocks

A Perfect Auto Clock

Phinney-Walker Keyless Auto Clocks are handsome in appearance and are especially adapted to withstand the hard usage and vibration of automobile travel.

Model M. This is one of the handsomest auto clocks made, a very reliable timekeeper, and meets the demand for those who want a good clock at a reasonable price. 2½-inch dial.



Model M

Model M Keyless Clock, Brass	\$10.50
Model M Keyless Clock, Nickel	10.50
Model M Keyless Clock, Black	10.50
Model M Keyless Clock, Black and Nickel	10.50
Each..D.P.	\$11.66

Model M Junior resembles Model M, excepting that it is smaller and meets the demand for those who want a good small clock at a low price. 2½-inch dial.

Model M Jr. Keyless, Nickel, each	\$10.50
Model M Jr. Keyless, Black, each	10.50
Model M Jr. Keyless, Black and Nickel, each	10.50
Each..D.P.	\$11.66

Model L. Handsome little clock and good timekeeper. Very popular for cars having small dash and for electric. Has straight base and may be fitted in a small space, as it occupies but little room. 2½-inch dial.



Model L

Model L Keyless, Nickel, each	\$10.50
Model L Keyless, Black, each	10.50
Model L Keyless, Black and Nickel, each	10.50
Each..D.P.	\$11.66



Model 7 Cowl

Specially adapted for the Cowl Dash and made to be countersunk so as to project just far enough to be wound. 2½-inch dial.

Model 7 Keyless Cowl Clock, Nickered	\$12.50
--	---------

Model 12 Cowl resembles No. 7 Cowl in outward appearance excepting the clock is smaller. 2½-inch dial.

Model 12 Cowl Keyless Clock, Nickered	\$12.50
Each..D.P.	\$12.22



CLOCKS

Waltham Automobile Clocks

ACCURATE AND RELIABLE

Waltham Clocks are the best and highest priced clocks that are offered to the trade and are sought by those who insist on having a thoroughly reliable and correct timepiece.

Waltham Automobile Clocks are stem wind and stem set—the winding crown is always accessible. Movement need never be exposed to elements in any model. Adjusted to temperature. Will run eleven days with one winding, two extra long main springs making this possible. Fifteen jewels. Winding Indicator feature shows red spot on face of dial three days before clock runs down.



Model C

The Waltham is Standard Equipment on the following cars:

Crane	Pierce-Arrow
Detroit	Rauch & Lang
Franklin	Rolls-Royce
Jeffery	Russell-Knight
Locomobile	Stevens-Duryea
Marmon	Simplex
Packard	



Model S



Model O

The Waltham (Model C) is the only automobile clock endorsed and supplied for special equipment by the Cadillac factory on their new eight cylinder car.

Model V—same as Model C with 3½-in. dial.

Model W—same as Model C with 4-in. dial.

For Limousines, Coupes or other closed cars, Model "B" is especially recommended. This is usually preferred in oxidized silver finish.

Waltham Clocks, all models, each.....\$25.00

Each.....D.P. \$44.44



Model B

Above price includes choice of finish on cases and dials as follows:

Cases—

Black Enamel
Brass
Nickel
Oxidized Silver

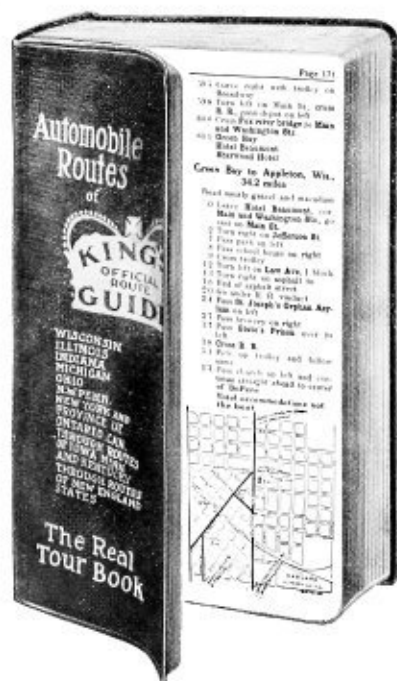
Dials—

Black
Silver
White Enamel



ROAD GUIDES

King's Official Automobile Route Guides



Commonly known as the "Automobile Red Books." They are accurate, comprehensive and satisfactory.

King's No. 1 contains the routes of Wisconsin, Minnesota, Michigan, Illinois, Eastern Iowa and Indiana\$2.00

King's No. 2, Ohio, Kentucky, N. W. Pennsylvania, New York, New Jersey and Province of Ontario, Can. 2.00
Each....D.P. \$3.32

King's Section 3, Wisconsin, part of Minnesota and the Upper Peninsula of Michigan..... 1.00

King's Section 4, Illinois, Eastern Iowa, Northern Missouri 1.00

King's Section 5, Indiana 1.00

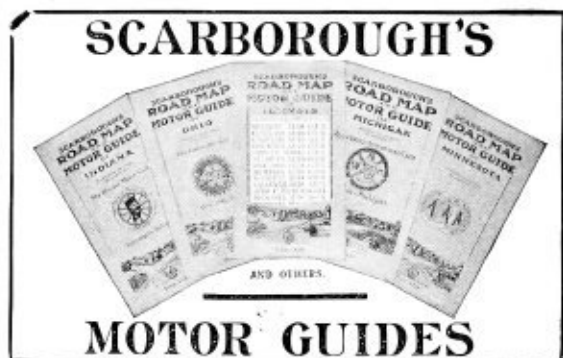
King's Section 6, Ohio and Kentucky..... 1.00

King's Section 7, Michigan and Province of Ontario, Canada 1.00

King's Section 8, New York, N. W. Pennsylvania, part of New Jersey and Province of Ontario, Canada 1.00
Each....D.P. \$1.66

King's Nos. 1 and 2 contain all the routes as in the Section Guides.

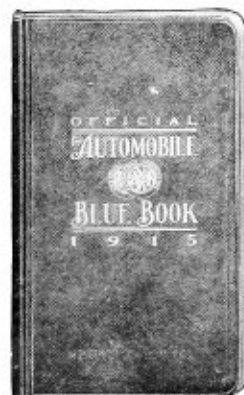
Scarborough's Guide



Scarborough's Road Maps and Motor Guides are complete guides. Adopted as the Official Guide of fifteen of America's largest automobile clubs. Fully indexed, hotel and garage directory. Complete state maps in four sections, so arranged that any section or part can be looked at without unfolding. Supplied for the following states: Ohio, Indiana, Illinois, Tennessee, Florida, Georgia, Missouri, Wisconsin and Minnesota.

Each\$1.00
Each....D.P. \$1.77

Official Automobile Blue Book



Volume 1—New York and Canada, including new detail maps\$2.50

Volume 2—New England and Maritime Provinces. 2.50

Volume 3—New Jersey, Pennsylvania and South-east States 2.50

Volume 4—The Middle West 2.50

Volume 5—Mississippi River to Pacific Coast..... 2.50

Volume 6—California, Oregon and Washington..... 2.50

Each....D.P. \$4.44



RADIATOR EMBLEMS

Gobbo



No. 5177. Gobbo, height $4\frac{1}{2}$ inches, width $2\frac{1}{2}$ inches,
each\$2.00
Each...D.P. \$2.44

Kewpie



No. 10. Metal Kewpie, each\$3.00
Each...D.P. \$4.44

Devil



No. 12. Devil, each\$3.50
Each...D.P. \$5.00

Democratic Donkey



No. 5464. Democratic Donkey, height $4\frac{1}{2}$ inches,
width $3\frac{1}{2}$ inches, each\$1.75
Each...D.P. \$2.44

G. O. P. Elephant



No. 5298. G. O. P. Elephant, height $2\frac{1}{2}$ inches,
length $3\frac{1}{2}$ inches, each\$1.75
Each...D.P. \$2.44

Yale Bull Dog



No. 5274. Yale Bull Dog, height $2\frac{1}{2}$ inches, length
 $4\frac{1}{2}$ inches, each\$2.00
Each...D.P. \$2.77



RADIATOR EMBLEMS

F. & A. Mason



No. 5420. Masonic Emblem, height 4 inches, width 3½ inches, each\$1.50
Each...D.P. \$2.22

Shriner



No. 5421. Shriner Emblem, height 2¼ inches, width 4½ inches, each\$1.50
Each...D.P. \$2.22

Shriner Camel



No. 5270. Shriner Camel, height 3½ inches, length 4 inches, each\$2.00
Each...D.P. \$2.77

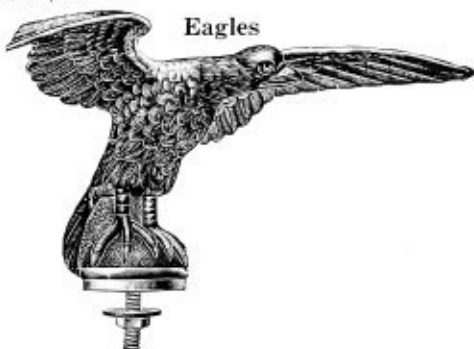
B. P. O. E.

Elk



No. 5273. Elk Emblem, height 5 inches, width 4½ inches, each\$2.25
Each...D.P. \$2.77

Eagles



No. 5311. Eagle, height 6 inches, width 11 inches, each\$5.00
Each...D.P. \$4.44
No. 5419. Eagle, height 4 inches, width 7 inches, each\$2.00
Each...D.P. \$2.44

M. D. Cross



Cross Enamelled in Red

No. 5430. Doctor's Emblem, height 3 inches, width 2½ inches, each\$2.00
Each...D.P. \$2.44



GOGGLES

Z1 Zylbex Eye Protector



No. Z1 Zylbex Eye Protector. A unique eye protector combining unusual features of comfort, distinctive design and quality at a popular price. Introduces novel construction and appearance which will appeal to discriminating buyers. Affords protection at sides as well as front for motoring, boating, golfing, gunning and in fact for all sports where there is wind, dust, glare, or danger from flying insects, etc. Its light weight appeals to those who have never used goggles before. Fits any face and can be worn over other glasses. Fine quality zylonite (imitation tortoise shell) frames. High-grade mi-coquille lenses—amber, flenzal, smoke or white. Soft leather sides. Gilt alloy or white metal cable riding bow temples. Each pair in a neat cloth covered steel case.

Per Pair.....\$1.25

Per Dozen Pair....D.P. \$16.65

Z21 Zylbex Eye Protector



No. Z21 Zylbex Protection Glass. A novel and distinctive style—new in every way. Combines high quality, comfort, distinction, and great value at a reasonable price. Very desirable for golfing, shooting, motoring, at the seashore, and for all sports where eyes need protection from wind and glare. They can be worn over other glasses. The construction and appearance of this glass will appeal to buyers who want refinement and quality. The value of this protection glass needs no comment to wide awake dealers. Fine quality zylonite (imitation tortoise shell) frames; gilt alloy or white metal cable riding bow temples. High-grade mi-coquille lenses in amber, flenzal, smoke or white, 1 3/4 in. diameter. Each pair supplied in a neat box.

Per Pair.....\$1.00

Per Dozen Pair....D.P. \$11.65

ZF1 Zylbex Self Adjusting Goggle



No. ZF1 Zylbex Self-Adjusting Goggle—the goggle which will win the favor of the best class of motorists and sportsmen who want styles which are the vogue—comfortable, distinctive, inconspicuous, and of high quality. The self-adjusting feature is unique and gives great comfort. A sporting glass which can be worn at the most exclusive places and at the same time appeal to those who want the utmost in comfort, ease and protection. Zylonite (imitation tortoise shell) frames. Soft cable, gilt alloy or white metal riding bow temples, well ventilated leather side guards. Exceptionally high-quality lenses, amber, amethyst, flenzal, smoke or white, 1 3/4 in. in diameter. Each pair in a handsome leather case.

Per Pair.....\$2.00

Per Dozen Pair....D.P. \$26.64

Universal Goggle

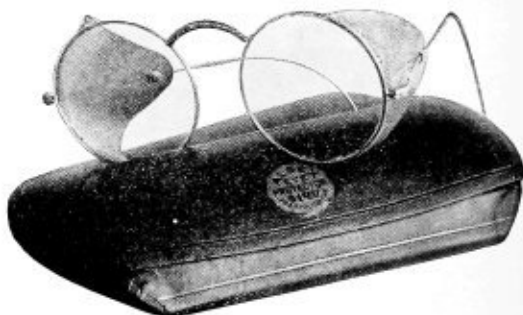


This style represents a remarkable value and will appeal to those who wish to pay only 50 cents for a goggle. Made of rust-proof white metal, riding bow temples, saddle bridge. Amber, smoke or blue lenses 1 3/4-inch diameter. Each pair furnished in an attractive, hinged cover, black box.

Per Pair.....\$0.50

Per Dozen Pair....D.P. \$8.33

Albex Eye Protector



No. A1 Albex Goggle is without doubt one of the most popular styles. Light as a feather, compact, adjustable and perfectly complete in its protection. Solid white metal frame, easy cable temples, well ventilated, leather sides and the exclusive Wilson adjustable brace bridge.

Per Pair.....\$1.00

Per Dozen Pair....D.P. \$15.00

Albex Night and Day Goggle



No. G11 1/2 Night and Day Goggles. For protection against headlight and sun glare. Comfortable, effective and unique. Just as good for day driving as night driving.

The Albex Night and Day Goggle has lenses made in two sections, light and dark amber. Natural vision for either day or night is through the lower light colored part. When a blinding light of any kind is encountered, a slight tip of the head enables one to see with perfect clearness through the upper and darker portion.

Solid white metal rims and easy cable temples. Flexible bridge. Well ventilated leather sides. Large circular lenses 1 3/4-inch in diameter, of fine quality glass. Lower segment ground and polished to insure freedom from eye strain. Packed in an attractive genuine leather covered steel case.

Per Pair.....\$2.50

Per Dozen Pair....D.P. \$35.52



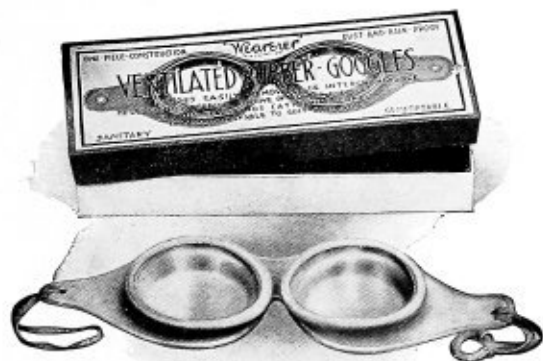
GOGGLES

Peerless Auto Goggles



No. 414 Goggles with shell frames, amber lenses. Very light and comfortable. Complete with case. Per pair\$1.50
Dozen Pair....D.P. \$19.98

Wearever Rubber Goggles



30380

One-piece construction. Dust and rain proof. Sanitary. Comfortable.

Each goggle packed separately in card board box.

30380 Wearever. All rubber, red, ventilated; curved lenses, removable or interchangeable, held tight in special groove of rubber eye cups; elastic head bands (attaching cords) interchangeable to suit size. Per pair.....\$0.75
Per Dozen Pair....D.P. \$8.88

30381 Wearever. Same as 30380 but with extra pair smoke or amber lenses. Per pair..... 1.00
Per Dozen....D.P. \$10.65

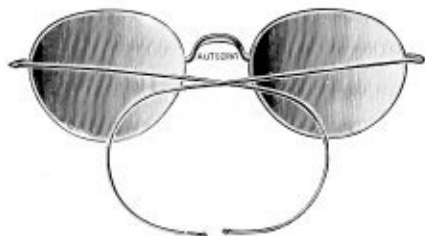
Autocrat Openair Eye-Guards Sportsman's Glasses



322 Autocrat Open-air Eye-Guard, Oxford shape, gold filled 10k. warranted frames, cable temples, hoop bridge, strengthening brace at top of frames, large oval, flattened end, curved amber glasses $2\frac{1}{2} \times 2$ -in., substantially constructed, light enough for constant wear, weight $1\frac{1}{2}$ ounces. An effective eye-shield for motoring, yachting, golfing, shooting, fishing and all out-door sports; in spring cover cases. Per pair.....\$2.50
Dozen Pair....D.P. \$35.96

323 Autocrat Open-air Eye-Guard, same as 322 with highly polished nickel frame; in spring cover case. Per pair..... 2.00
Per Dozen Pair....D.P. \$27.75

Autocrat Junior



324 Autocrat Junior Open-air Eye-Guard, gold filled 10k. warranted frames, velvet temples, cylinder saddle bridge, clerical, curved amber glasses $1\frac{1}{2} \times 1\frac{1}{2}$ -in., very light, substantial construction for constant out-door wear; weight. 1 ounce. Suitable for all sporting uses and for ladies' wear; in spring cover case, per pair.....\$2.25
Per Dozen Pair....D.P. \$31.96

325 Autocrat Junior Open-air Eye-Guard, same as 324 with highly polished nickel frames; in spring cover case, per pair 1.80
Per Dozen Pair....D.P. \$23.98



PADLOCKS

Yale Padlocks



No. D1701BS

No. D1701BS—1½ inches; cast bronze case, nickel-plated steel shackle; four pin-tumblers; two paracentric keys; changes practically unlimited. With dust guard, each\$1.60
Dozen...D.P. \$23.33



No. 701BS



No. 815—Standard

No. 701BS—1½ inches; cast bronze case; nickel-plated steel shackle; four pin-tumblers; two paracentric keys; changes practically unlimited, each\$1.10
Dozen...D.P. \$18.33

No. 815—1 inch; bronze case, fine wheel finish; bronze wire shackle, wheel finish; three lever-tumblers; two fluted keys, forty-eight changes, each\$1.20
Dozen...D.P. \$18.88



No. 823—Standard



No. 853—Standard



No. 830



No. 823—1½ inches; bronze case and shackle, fine wheel finish; three lever-tumblers; two fluted keys, forty-eight changes, each\$1.20
Dozen...D.P. \$20.55

No. 853—2 inches; bronze case and shackle, fine wheel finish; four lever-tumblers; two fluted keys, 144 changes, each\$1.75
Dozen...D.P. \$28.88

No. 830—1½ inches; cast bronze case; steel shackle; five pin-tumblers; two paracentric keys, changes practically unlimited, each\$1.60
Dozen...D.P. \$26.66



No. 8414—Monitor



No. 8434V—Monitor



No. 6128—Terror



No. 681V



No. 8414—1 inch; Bower buffed steel case and shackle; three lever-tumblers; two flat steel keys, forty-eight changes, each\$0.75
Dozen...D.P. \$12.22

No. 8434V—1½ inches; sand blasted brass case; polished brass shackle; three lever-tumblers; two flat steel keys, forty-eight changes, each\$0.90
Dozen...D.P. \$16.00

No. 8434V—1½ inches; sand blasted brass case; polished brass shackle; three lever-tumblers; two corrugated steel keys, forty-eight changes, each\$1.20
Dozen...D.P. \$20.00

No. 6128—1½ inches; ivory black steel case; nickel-plated steel shackle; two lever-tumblers; two flat steel keys, twelve changes, each\$0.35
Dozen...D.P. \$5.55

No. 681V—1 inch; dipped bright brass case and shackle; four lever-tumblers; two flat steel keys, twelve changes, each\$0.50
Dozen...D.P. \$7.77



PADLOCKS

Yale Padlocks



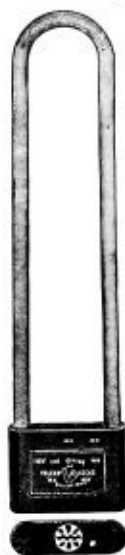
No. 830



No. 6158—Terror



No. 563VX—Defiance



No. 2115J



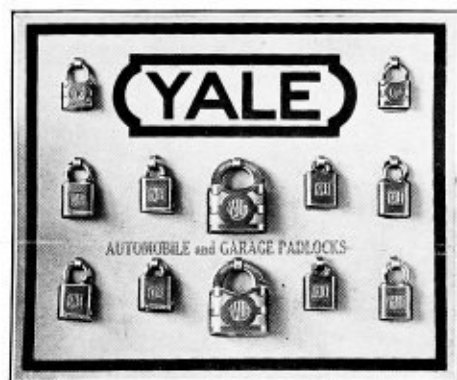
No. 830—1½ inches; cast bronze case; steel shackle with 2½-inch clearance; five pin-tumblers; two paracentric keys; changes practically unlimited, each.....\$1.50
Dozen...D.P. \$28.44

No. 6158—2½ inches; ivory black steel case; nickel-plated steel shackle with 2½-inch clearance; two lever-tumblers; two flat steel keys; twelve changes, each... .40
Dozen...D.P. \$6.88

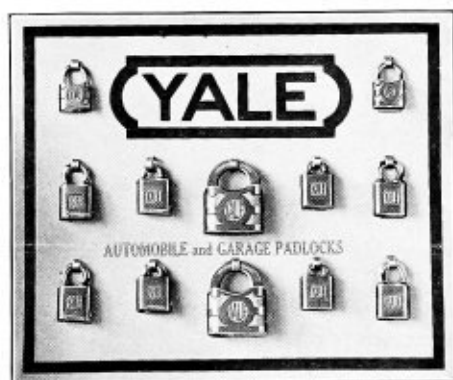
No. 563VX—1½ inches; buffed brass case; nickel-plated steel shackle with 2½-inch clearance; three lever-tumblers; two flat steel keys, forty-eight changes, each.....\$0.90
Dozen...D.P. \$16.00

No. 2115J—2 inches; black japanned ivory case; nickel-plated steel shackle with 6½-inch clearance; two corrugated steel keys, six changes, each......50
Dozen...D.P. \$7.77

Padlock Cards



No. N5 Padlock Card
Size 13½x15½ inches



No. N16 Padlock Card
Size 13½x15½ inches

The padlocks on this card are specially adapted for use on automobiles and garages. The locks are as follows:

No.	Size	Case
853	2 inch	Bronze
815	1 inch	Bronze
D1701BS	1½ inch	Bronze
D701BS	1½ inch	Bronze
1701BS	1½ inch	Bronze
701BS	1½ inch	Bronze

Price, each card.....\$15.75

Per Card...D.P. \$22.77

This assortment is the same as N5 except that one each of Nos. 815, 701BS, D701BS, 1701BS and D1701BS are buffed nickel finish.

No.	Size	Case
815	1 inch	Bronze
815N	1 inch	Nickel plated
853	2 inch	Bronze
701BS	1½ inch	Bronze
701BSN	1½ inch	Nickel plated
D701BS*	1½ inch	Bronze
D701BSN*	1½ inch	Nickel plated
1701BS	1 inch	Bronze
1701BSN	1 inch	Nickel plated
D1701BS*	1 inch	Bronze
D1701BSN*	1 inch	Nickel plated

List Price, each card.....\$16.25

*With dust guard.

Per Card...D.P. \$23.88



LOCKS AND BUCKETS

The Improved Keyless Wonder Padlock



Labyrinth System
Padlock

Simple and convenient. Eight parts. No numbers to look for, no tumblers or springs to stick or jump out of place. Always responds to correct combination.

Not affected by climate, water, dust or oil. Guaranteed.

No. 5 Keyless Padlock, dull black enamel finish, each \$0.75
Each...D.P. \$1.10

Special Information

To open, simply turn knob a few times to left and right—counting number of clicks—it opens at once. Can be operated with gloves on, at night. Cannot be opened unless combination is known. Every padlock is put up in individual carton with complete instructions for operating.

All locks are secretly numbered and combinations recorded at factory for information of proper parties only. Can furnish any number of locks set on different combinations, or all set on the same number.

American Chain Lock

American Chain Automobile and Tire Locks are made of the flat link American type steel chain. They offer many advantages over the ordinary chain lock because of the flat links, which give the chain a strap-like action, and permit its being drawn closely around shoes and running board or through a wheel and spring or frame, making the only real protection against automobile thieves. They are simple, strong, noiseless and when not in use take up small space in the tool box.



Chain covered with best grade genuine oil-tanned leather, complete with lock.

No. 50 Automobile Lock with 36-in. chain, each...\$1.25
Each...D.P. \$1.66

No. 501 Automobile Lock with 42-in. chain, each...1.50
Each...D.P. \$2.00

Chain For Auto Locks



No. 12 Bright Chain (without lock), 36-in., each...\$0.40
Each...D.P. \$0.55

No. 121 Bright Chain (without lock), 42-in., each... .50
Each...D.P. \$0.66

No. 52 Bright Chain, covered with best grade oil-tanned leather (without lock), 36-in., each... .80
Each...D.P. \$1.22

No. 521 Bright Chain, covered with best grade oil-tanned leather (without lock), 42-in., each... .95
Each...D.P. \$1.44

The Duplex Folding Canvas Pail



No. 12 Open

The Duplex Water Pails are the only collapsible or folding pails that you can throw water with, or that can be set down without losing contents. Rigid, strong and simple, they occupy less space when folded than any other. Made of heavy brown



Closed

canvas, water-proofed. Metal parts are spring steel, rust-proofed. They are water-tight in any climate and will not become brittle or decay through use or disuse.

No.	Capacity	Diam.	Depth	Folds Into	Each
4	6 qts.	11 in.	7½ in.	10½x6x2½ in.	\$1.00
Each...D.P.	\$1.66				
12	10 qts.	11 in.	9½ in.	13½x6x2½ in.	1.50
Each...D.P.	\$2.48				



No. 5 Open

The Duplex Automobile Pails have splash guard, strainer and spout, which allows water to be secured from any lake or stream, and the radiator, tea kettle or glass filled with water strained clean enough to drink. The



Closed

quick, easy way of opening and folding appeals to every one, and the fact that they can be carried folded flat under seat cushion, or folded double in tool box, makes them handy and not cumbersome when not in use. The ideal outing pails.

No.	Capacity	Diam.	Depth	Folds Into	Each
3	6 qts.	10 in.	7½ in.	10½x6x2½ in.	\$1.50
Each...D.P.	\$2.48				
5	10 qts.	11 in.	9½ in.	13½x6x2½ in.	2.00
Each...D.P.	\$3.32				

The Duplex Handy Baskets carry liquids or solids equally well and will keep ice or water cool. They can be washed or you can wash dishes in them. Made of brown canvas, water-proofed. Metal parts are spring steel, rust-proofed.

A Folding Refrigerator Basket



All have double handles and covers fasten with pull-down snap hooks. For campers, excursions, fishermen, picnics or marketing they are ideal, as when empty they can be folded and packed away in a very little space.

No.	Length	Width	Depth	Folds Into	Each
316	16 in.	9½ in.	7½ in.	10½x8½x3 in.	\$2.00
Each...D.P.	\$3.32				
316	18 in.	11 in.	9½ in.	12 x9½x3 in.	2.50
Each...D.P.	\$4.18				



VACUUM BOTTLES AND FOOD JARS

Universal Vacuum Bottles



Popular priced bottle. Heavy cold rolled metal with fine baked black enamel finish. Heavily tinned seamless cap. Patented shock absorber. No paper or pads to become foul. Made in pints and quarts only.

	Each
No. 61 Pint	\$1.00
Each...D.P. \$1.66	
No. 62 Quart	2.00
Each...D.P. \$3.32	

Black enamel body and nickel plated shoulder and cap, an attractive combination. Rubber gasket in shoulder. Patented spring retainer and shock absorber.

	Each
No. 70 Half Pint	\$1.25
Each...D.P. \$2.08	
No. 71 Pint	1.25
Each...D.P. \$2.08	
No. 72 Quart	2.25
Each...D.P. \$3.75	



"Universal" standard full nickel-plated bottle, made of seamless nickel plated brass. Simple and artistic in its lines. Perfectly smooth and beautifully finished. Rubber gasket in shoulder. Patented spring retainer and shock absorber.

	Each
No. 80 Half pint	\$1.50
Each...D.P. \$2.50	
No. 81 Pint	1.50
Each...D.P. \$2.50	
No. 82 Quart	2.50
Each...D.P. \$4.18	

Extra Glass Fillers for these Bottles

No. 00 Half pint	\$0.85
Each...D.P. \$1.42	
No. 01 Pint .....	.85
Each...D.P. \$1.42	
No. 02 Quart	1.50
Each...D.P. \$2.48	



Universal Vacuum Food Jars



Pint Japan Food Jar

Will carry and maintain temperature of hot baked beans, meat stews, etc., or cold salads, ice cream and ices.

These "Universal" Vacuum Jars have a heavy cold rolled metal case with baked black enamel finish. The cap is seamless drawn steel heavily tinned. Bayonet clasps. Full width mouth, highest quality filler, protected from breakage by patented spring retainer. An efficient inexpensive jar. Made in pints and quarts only.

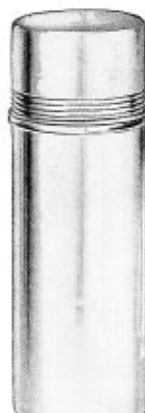
	Each
No. 711 One Pint	\$1.50
Each...D.P. \$2.48	
No. 011 Extra Filler	1.25
Each...D.P. \$2.08	
No. 712 One Quart	2.50
Each...D.P. \$4.18	
No. 012 Extra Filler	2.00
Each...D.P. \$3.32	



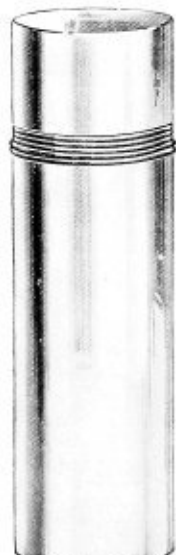
Quart Japan Food Jar



Half Pint Nickel Butter Jar



Pint Nickel Food Jar



Quart Nickel Food Jar

Full Nickel Jars. Excel in simplicity of construction and design. Cases are seamless drawn brass, smooth and beautifully finished in heavy nickel plate. Have drawn brass nickel plated shoulder and patented metal spring retainer to protect fillers. Highest grade full width mouth fillers. Made in quarts, pints and half-pints.

	Each		Each
No. 800 One-half Pint	\$2.00	No. 011 Extra Filler	1.25
Each...D.P. \$3.32		Each...D.P. \$2.08	
No. 010 Extra Filler	1.25	No. 812 One Quart	3.00
Each...D.P. \$2.08		Each...D.P. \$5.00	
No. 811 One Pint	2.00	No. 012 Extra Filler	2.00
Each...D.P. \$3.32		Each...D.P. \$3.32	

Keep Liquids Hot 24 hours, Cold 72 hours.



CARAFES AND CARRYING CASES



**Universal
Vacuum
Carafes**

Universal Carafes are all of one-quart capacity.



Heavy Nickel Plated Case

Full Nickel Plated Case Covering Glass Filler Completely

No. 822 With Metal and Cork Stopper.....	\$3.50
Each...D.P. \$5.82	
No. 8822 With Glass Stopper and Chain.....	4.00
Each...D.P. \$6.66	
No. 922 Extra Filler for No. 822.....	2.50
Each...D.P. \$4.18	
No. 9422 Extra Filler for No. 8822.....	3.00
Each...D.P. \$5.00	
No. 1822 With Metal and Cork Stopper.....	4.50
Each...D.P. \$7.50	
No. 2822 With Glass Stopper and Chain.....	5.00
Each...D.P. \$8.32	
No. 9122 Extra Filler for No. 1822.....	2.50
Each...D.P. \$4.18	
No. 9322 Extra Filler for No. 2822.....	3.00
Each...D.P. \$5.00	



**Universal Carafe
with Handle**

Universal Carafe Carrier

Fits any quart size carafe. Made of solid brass, heavily nickel plated.

No. 5822 With Metal and Cork Stopper.....	\$5.50
Each...D.P. \$9.15	
No. 6822 With Glass Stopper and Chain.....	6.00
Each...D.P. \$10.00	
No. 9122 Extra Filler for No. 5822.....	2.50
Each...D.P. \$4.18	
No. 9322 Extra Filler for No. 6822.....	3.00
Each...D.P. \$5.00	
No. 39 Carrier and Glasses, without bottle.....	3.00
Each...D.P. \$5.00	
No. 391822 Complete with No. 1822 Bottle.....	7.50
Each...D.P. \$12.48	

Fiber Carrying Cases

Made of black hard fiber; serviceable, slightly and inexpensive. Pint and quart sizes for one bottle only.

No. 401 Pint.....	\$0.75
Each...D.P. \$1.26	
No. 402 Quart.....	1.00
Each...D.P. \$1.66	



Leatherol Carrying Cases

Black leatherol with green lining. Thoroughly well made, attractive and durable cases.



For One Bottle



**D-Shaped
For Two Bottles or One Bottle and a Lunch Box**

No. 501 Pint.....	\$1.00
Each...D.P. \$1.66	
No. 502 Quart.....	1.25
Each...D.P. \$2.08	
No. 521 Pint.....	1.75
Each...D.P. \$2.90	
No. 522 Quart.....	2.25
Each...D.P. \$3.75	

Genuine Cow Hide Carrying Cases

Saddle sown throughout. Made of selected stock; finest hand workmanship. Lined with green leatherol.



For One Bottle



For Two Bottles

No. 601 Pint.....	\$3.50	No. 611 Pint.....	\$5.00
Each...D.P. \$5.82		Each...D.P. \$8.33	
No. 602 Quart.....	4.50	No. 612 Quart.....	7.00
Each...D.P. \$7.50		Each...D.P. \$11.66	



CUPS, LUNCH KITS AND DINNER SETS

Nested Drinking Cups



Finely made metal drinking cups, all of one size, nested in sets of two, four and six cups. Heavy drawn brass, nickel-plated and highly polished. Each cup has detachable handle that can be quickly and firmly attached to cup. Very compact package, at the extreme left, where as illustrated, the complete set is nested with the handles inside and cover holding cups together. A desirable addition to picnic or camping equipment.

No. 362 Set of two cups with handle.....	\$0.75
Per Set.....D.P. \$1.24	
No. 364 Set of four cups with handle	1.00
Per Set.....D.P. \$1.66	
No. 366 Set of six cups with handle.....	1.25
Per Set.....D.P. \$2.08	

Universal Lunch Kit



With Vacuum Bottle and Drinking Cup

Appeals to all who lunch away from home. Unquestionably the strongest and best made lunch kit on the market. Already has thousands of satisfied users. Metal throughout with roomy compartment for food. Equipped with pint Universal Vacuum Bottle serving any drink one may choose as hot or cold as desired and with original taste and freshness unimpaired.

No. 10 Tan with brass trimmings.....	\$2.25
Each.....D.P. \$3.75	
No. 310 Black with nickeled trimmings.....	2.25
Each.....D.P. \$3.75	



With Vacuum Bottle, Drinking Cup and Aluminum Trays

No. 20 Tan, brass trimmings	\$2.50
Each.....D.P. \$4.18	
No. 320 Black, nickeled trimmings	2.50
Each.....D.P. \$4.18	
No. 01 Extra Filler for "Universal" Lunch Kits .....	.85
Each.....D.P. \$1.42	

Universal Motor Luncheon Sets

For the most critical trade. Completely equipped for two, four or six persons. High grade in every particular. Light, strong cases, dust and rain proof. Covered with fine black grained enameled duck, lined with green leatherol. Nickel-plated brass locks.

Equipped with Universal vacuum bottles, Universal vacuum butter jar, food boxes, plates, knives, forks, spoons, napkins, sugar or preserve jars, salt and pepper shakers, nested drinking cups.



No. 232 For two persons	\$27.00
Each.....D.P. \$46.10	
No. 242 For four persons	38.50
Each.....D.P. \$64.18	
No. 262 For six persons	45.00
Each.....D.P. \$75.00	

Running Board Set

Most complete, compact outfit. Exceptionally strong and handsome trunk covered with dull black grained enamel duck. All outside trimmings nickel-plated. Has improved flat key lock. Furnished with straps for fastening to running board or trunk rack, and handles for carrying. Completely equipped for four or six persons.



Equipped with Universal vacuum bottles, Universal vacuum butter jar, food boxes, plates, knives, forks, spoons, napkins, sugar or preserve jars, salt and pepper shakers, nested drinking cups.

No. 442 For four persons	\$47.50
Each.....D.P. \$79.15	
No. 462 For six persons	55.00
Each.....D.P. \$91.66	



ODOMETERS AND SPEEDOMETERS

Series 102—Three-inch Models



Model 102

Model 102. Has rotating Speed Dial, 60-mile capacity—Stewart Odometer, consisting of 100,000-mile Season Register and 100-mile Trip Register. Mile numbers on Trip Register are black on white; tenths red on white. Mile numbers on Season Register are black on white. Trip Register can be easily reset to any tenth of a mile, and without disturbing the record of the Season Register. Speedometer has jeweled bearings, polished steel magnet, Stewart "closed ring" type, silver etched 3-in. dial face, French plate dial glass. Case is finished in "deep" jet lacquer and polished metal trim. (See illustration.) 3-in. dial face.

Each \$25.00
Each...D.P. \$37.04

Model 102-A. This is the same as Model 102, but furnished with a 100-mile Speed Dial.

Each \$25.00
Each...D.P. \$37.04

Series B-Z—Four-inch Models



Model B-Z

Model B-Z. Has extra large rotating Speed Dial—60-mile capacity. Extra large Stewart Odometer, consisting of 100,000-mile Season Register and 100-mile Trip Register. Mile numbers are black on white; tenths red on white. Trip Register can be rapidly reset to any tenth of a mile, and without disturbing the record of the Season Register. Speedometer has full jeweled bearings, polished Tungsten Steel Magnet, Stewart "closed ring" type; silver etched dial face. French plate dial glass; case finished in "deep" jet lacquer and polished metal trim.

Each \$50.00
Each...D.P. \$74.06

Model B-Z-5. This is the same as Model B-Z, with the exception that it is furnished with a Tungsten electric light.

Each \$55.00
Each...D.P. \$81.48

Model 102-F

Model 102-F. This is the same as Model 102, described above, but mounted in a flush type flange. (See illustration.)



Model 102-F

Each \$25.00
Each...D.P. \$37.04

Model 102-G. This is the same as Model 102-F, but furnished with a 100-mile Speed Dial.

Each \$25.00
Each...D.P. \$37.04



Model B-Z-12

Model B-Z-12. This is the same as Model B-Z, with the exception that it is mounted in a flush type flange.

Each \$50.00
Each...D.P. \$74.06

Model B-Z-14. This is the same as Model B-Z-12, with the exception that it has a Tungsten electric light. (See illustration.)

Each \$55.00
Each...D.P. \$81.48



Model 100

A new Stewart Speedometer designed specially for Ford cars, completed with all regular Stewart equipment, including flexible shaft and the famous Stewart swivel joint, ready to install on any Ford car. Of the same magnetic type and built of the same high grade materials as in instruments that go on highest priced automobiles.

The Stewart Model 100 has Rotating Speed Dial, 60-mile capacity—Stewart Odometer, consisting of 10,000-mile Season Register and 100-mile Trip Register. Mile numbers of Trip Register are black on white; tenths, red on white. Mile numbers of Season Register are black on white. Trip Register can be rapidly reset to any tenth of a mile, and without disturbing the record of the Season Register. Speedometer has jeweled bearings, polished steel magnet, silver etched dial face, French plate dial glass. Case finished in deep jet lacquer and polished brass trim.

Model 100 Special Stewart Speedometer for Ford cars.

Each \$12.00
Each...D.P. \$15.54 Lots of 12, each...D.P. \$14.45



SPEEDOMETERS AND ODOMETERS

Pointer Type Models



Model 26

Model 26. Hand Indicator, 60-mile capacity. Stewart Odometer, consisting of 100,000-mile Season Register, and 100-mile Trip Register. Mile numbers of Trip Register are black on white; tenths, red on white. Mile numbers of Season Register are black on white. Trip Register can be rapidly reset to any tenth of a mile, and without disturbing the record of the Season Register. 3-in. dial face.

Each\$20.00
Each...D.P. \$29.63



Model 26-A

Model 26-A. This is the same as Model 26, but mounted in a flush type flange.

Each\$20.00
Each...D.P. \$29.63

Cycle Car Models



Cycle Car Model, 101-C

Model 101-C. 2 1/2-in. dial face, 75-mile scale; 10,000-mile Season Record; 100-mile Trip Register.

Each, complete\$15.00
Each...D.P. \$22.22

Model 101-D. Same as Model 101-C, but mounted in a flush type flange.

Each\$15.00
Each...D.P. \$22.22

Truck and Electric Vehicle Speedometers



Model 104

Model 104. Rotating Dial, 3-in. dial face, 30-mile scale, 100,000-mile Season Record, 100-mile Trip Register. Suitable for either trucks or electric cars.

Each\$20.00
Each...D.P. \$29.63



Model 105. Odometer Only

Model 105. Odometer only; 100,000-mile Season Record, 100-mile Trip Register.

Each\$15.00
Each...D.P. \$22.22

Stewart Hub Odometer



Model H. Hub Odometer

The Stewart Hub Odometer is operated by a positive drive that cannot possibly fail. This drive consists, not of thin metal discs, but of steel pinions with worm and spiral gears, each pinion being machined from a single piece of steel, heat treated and hardened, to resist wear. With this positive drive there can be no failure of the Odometer to record; every turn of the car wheel is registered with absolute accuracy. Through an ingenious application of the "Geneva Stop" mechanism the dials are locked, excepting at the instant of registering. Those not registering remain locked. Thus it is impossible for the dials to fail to register or to register incorrectly, as they cannot make a single false movement.

Model H (including hub cap), each\$15.00
Each...D.P. \$22.22



MOTORCYCLE SPEEDOMETERS

Rigid-Tube, Front-Wheel Drive

Model 101

This wonderful new motorcycle speedometer, front-wheel drive, does away with all the troubles that have been experienced with former front-wheel drive models. The tremendous vibration that the front wheel of the motorcycle receives, together with the action of the spring fork, was terrible punishment to a flexible shaft. By reason of the lower bracket formerly being held rigid, all the vibration, shock and spring action was felt by the flexible shaft, resulting in endless trouble and breakage.

But all of this has now been obviated by the use of the new "rigid tube" driving shaft, in place of the flexible shaft. Also, instead of the lower bearing bracket being held rigid, it is now attached only to the front wheel axle, the pinion being suspended in its position on the sprocket by means of the rigid, solid tube driving shaft. As now designed, all of the "whipping" and downward movement on the fork is taken up by the bracket working free on the axle. Any downward movement of the fork causes the rigid tube to push the pinion down slightly on the sprocket. This virtually makes a free connection, and all of the vibration and springiness that any motorcycle will ever experience can have absolutely no effect upon this new style of "Rigid Tube" driving shaft equipment.

Model 101. Rigid tube, front-wheel drive model, with new 2½-in. dial.



Each, complete\$12.00
Each.....D.P. \$17.77

The Famous Rear-Wheel Drive

Model 101-A

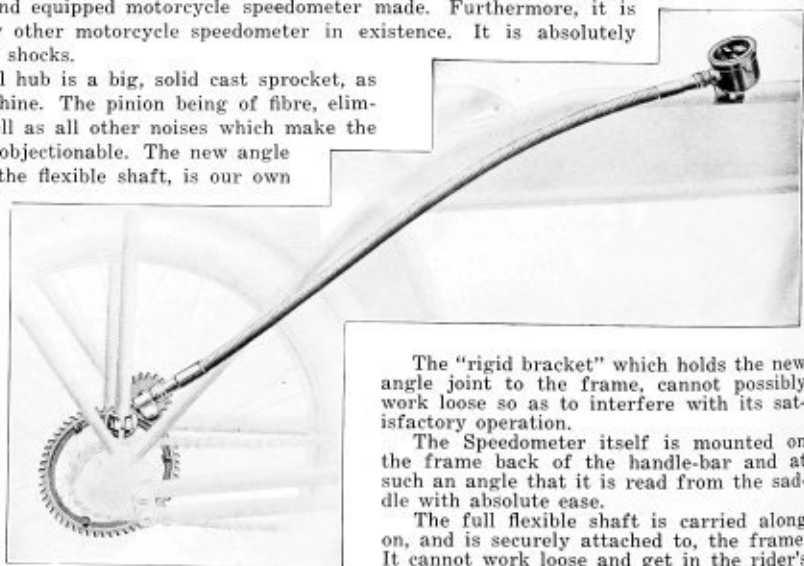
The most ruggedly built and equipped motorcycle speedometer made. Furthermore, it is more firmly attached than any other motorcycle speedometer in existence. It is absolutely unaffected by vibration or road shocks.

Fastened to the rear wheel hub is a big, solid cast sprocket, as strong as any part of the machine. The pinion being of fibre, eliminates all gear grinding, as well as all other noises which make the ordinary speedometer drive so objectionable. The new angle joint, between the pinion and the flexible shaft, is our own special design, and is an entirely new departure in this construction.

Model 101-A. New rear-wheel drive. Stewart model.

Each, complete\$12.00
Each.....D.P. \$17.77

The illustration shows one method of attaching it to the frame. Because of the difference in the designs of motorcycles, we make a special bracket for each make of motorcycle.



The "rigid bracket" which holds the new angle joint to the frame, cannot possibly work loose so as to interfere with its satisfactory operation.

The Speedometer itself is mounted on the frame back of the handle-bar and at such an angle that it is read from the saddle with absolute ease.

The full flexible shaft is carried along on, and is securely attached to, the frame. It cannot work loose and get in the rider's way. It is never subjected to any whipping or twisting strains. It is always in the best possible position for correct operation.



STEWART SPEEDOMETER PARTS

Road Wheel Gears



Cut-Out Type



Plain Type

Stewart Road Wheel Gears, any size or type, each \$1.00
Each....D.P. \$1.77

Drive Pinions



Cotter Pin Type



Lock Nut Type

Drive Pinions, either fibre or steel, either type, each \$0.25
Each....D.P. \$0.44

Swivel Joint



1908-1909 Type



1910 Type



1911-1915 Type

Stewart Swivel Joints, either type, each \$2.50
Each....D.P. \$4.44

Rubber and Metal Washers



1996



2199

No. 1996 Rubber Fender Washer, each \$0.15
Each....D.P. \$0.27

No. 2199 Brass Foot Board Collar, each \$0.15
Each....D.P. \$0.27

Shaft Hanger



No. 1998 Strap or Hanger for Flexible Shaft, each \$0.15
Each....D.P. \$0.27

Steering Knuckle Clamp Parts

Order these parts by number, if only a part is required; or if the complete clamp is wanted, give number of clamp (as shown in illustration).



512



4003



4007

No. 512 Clamp for Steering Arm, complete, each \$1.25
Each....D.P. \$2.22

No. 4003 Clamp Part (upright), each \$0.88
Each....D.P. \$0.88

No. 4007 Clamp Part (cross-bar and straight link, one piece), each \$0.30
Each....D.P. \$0.53



4017



4014



4015



4025

No. 4017 Clamp Part (axle clip), each \$0.15
Each....D.P. \$0.27

No. 4014 Clamp Part ("S" clamp link), each \$0.35
Each....D.P. \$0.35

No. 4015 Clamp Part (cross bar), each \$0.53
Each....D.P. \$0.53

No. 4025 Clamp Part (swivel block), each \$0.35
Each....D.P. \$0.35

Shaft Fittings



617



1880

No. 617 Sliding Bar and Lower End Clutch of chain, each \$0.20
Each....D.P. \$0.35

No. 1880 Upper End Clutch of Chain, each \$0.10
Each....D.P. \$0.17

Flexible Shaft and Chain



No. 1902 Flexible Shaft Chain, per ft. \$0.25
Per foot....D.P. \$0.44

No. 1799 Flexible Shaft, complete without leather covering, each \$3.00
Each....D.P. \$5.33

No. 1911 Flexible Shaft Casing, without leather covering, each \$3.11
Each....D.P. \$3.11

In ordering flexible shafts, state length wanted. These may be had from 48 to 72-in.



BOXES

Ford Style Boxes



- No. B-1586 Battery or Tool Box, size inside 15x7 $\frac{1}{2}$ x6 $\frac{1}{2}$, black enamel finish, each..... 2.85
Each..D.P. \$3.11 Per Dozen..D.P. \$32.00
- No. B-1886 Battery or Tool Box (Ford size), size inside 17 $\frac{1}{2}$ x7 $\frac{1}{2}$ x6 $\frac{1}{2}$, black enamel finish, each.. 3.25
Each..D.P. \$3.11 Per Dozen..D.P. \$32.00
- No. B-2296 Battery or Tool Box, size inside 22x9x6 $\frac{1}{2}$, black enamel finish, each..... 4.00
Each..D.P. \$3.33 Per Dozen..D.P. \$33.33
- No. 2416 Battery or Tool Box, size inside 23 $\frac{1}{2}$ x9 $\frac{1}{2}$ x6 $\frac{1}{2}$, black enamel finish, each..... 4.25
Each..D.P. \$4.44 Per Dozen..D.P. \$46.66

Battery or Tool Boxes, B Style



B style boxes have corners of 1 inch radius

- No. B-116 Battery or Tool Box, size inside 10 $\frac{1}{2}$ x5 $\frac{1}{2}$ x9 $\frac{1}{2}$, black enamel finish, each.....\$2.75
Each..D.P. \$3.00 Per Dozen..D.P. \$33.00
- No. B-148 Battery or Tool Box, size inside 13 $\frac{1}{2}$ x7 $\frac{1}{2}$ x9 $\frac{1}{2}$, black enamel finish, each..... 3.00
Each..D.P. \$3.00 Per Dozen..D.P. \$33.00
- No. B-158 Battery or Tool Box, size inside 15x7 $\frac{1}{2}$ x8 $\frac{1}{2}$, black enamel finish, each..... 3.00
Each..D.P. \$3.33 Per Dozen..D.P. \$37.33
- No. B-178 Battery or Tool Box, size inside 16 $\frac{1}{2}$ x7 $\frac{1}{2}$ x10 $\frac{1}{2}$, black enamel finish, each..... 3.50
Each..D.P. \$3.88 Per Dozen..D.P. \$42.66
- No. B-179 Battery or Tool Box, size inside 16 $\frac{1}{2}$ x9 $\frac{1}{2}$ x10 $\frac{1}{2}$, black enamel finish, each..... 4.50
Each..D.P. \$4.11 Per Dozen..D.P. \$45.55
- No. B-188 Battery or Tool Box, size inside 17 $\frac{1}{2}$ x7 $\frac{1}{2}$ x10 $\frac{1}{2}$, black enamel finish, each..... 3.50
Each..D.P. \$4.11 Per Dozen..D.P. \$45.55
- No. B-226 Battery or Tool Box, size inside 21 $\frac{1}{2}$ x5 $\frac{1}{2}$ x9 $\frac{1}{2}$, black enamel finish, each..... 4.00
Each..D.P. \$4.44 Per Dozen..D.P. \$48.00
- No. B-329 Battery or Tool Box, size inside 21x8 $\frac{1}{2}$ x9, black enamel finish, each..... 4.75
Each..D.P. \$5.55 Per Dozen..D.P. \$60.00

Battery or Tool Boxes, Style B—Continued

- No. B-2410 Battery or Tool Box, size inside 23 $\frac{1}{2}$ x9 $\frac{1}{2}$ x10 $\frac{1}{2}$, black enamel finish, each..... \$5.50
Each..D.P. \$6.11 Per Dozen..D.P. \$66.00
- No. B-2810 Battery or Tool Box, size inside 28 $\frac{1}{2}$ x10 $\frac{1}{2}$ x10 $\frac{1}{2}$, black enamel finish, each..... 7.00
Each..D.P. \$7.77 Per Dozen..D.P. \$86.66

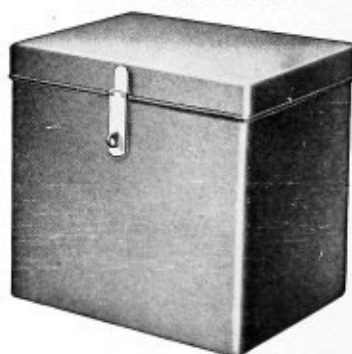
Battery or Tool Boxes, C Style



C style boxes have corners of $\frac{1}{2}$ inch radius

- No. C-117 Battery or Tool Box, size inside 10 $\frac{1}{2}$ x7x9 $\frac{1}{2}$, black enamel finish, each.....\$3.25
Each..D.P. \$3.55 Per Dozen..D.P. \$40.00
- No. C-119 Battery or Tool Box, size inside 11 $\frac{1}{2}$ x8 $\frac{1}{2}$ x10 $\frac{1}{2}$, black enamel finish, each..... 2.90
Each..D.P. \$3.00 Per Dozen..D.P. \$33.00
- No. C-166 Battery or Tool Box, size inside 15 $\frac{1}{2}$ x6 $\frac{1}{2}$ x9 $\frac{1}{2}$, black enamel finish, each..... 3.25
Each..D.P. \$3.55 Per Dozen..D.P. \$40.00
- No. C-168 Battery or Tool Box, size inside 16x8 $\frac{1}{2}$ x9 $\frac{1}{2}$, black enamel finish, each..... 3.25
Each..D.P. \$3.55 Per Dozen..D.P. \$40.00
- No. C-208 Battery or Tool Box, size inside 19 $\frac{1}{2}$ x8 $\frac{1}{2}$ x9 $\frac{1}{2}$, black enamel finish, each..... 3.75
Each..D.P. \$4.11 Per Dozen..D.P. \$45.55
- No. C-217 $\frac{1}{2}$ Battery or Tool Box, size inside 20 $\frac{1}{2}$ x6 $\frac{1}{2}$ x9 $\frac{1}{2}$, black enamel finish, each..... 4.25
Each..D.P. \$4.66 Per Dozen..D.P. \$48.44

Truck Style Boxes



- No. T-1410 Tool Box, size inside 14 $\frac{1}{2}$ x10 $\frac{1}{2}$ x13, black enamel finish, each..... 7.00
Each..D.P. \$7.77 Per Dozen..D.P. \$86.66
- No. T-1911 Tool Box, size inside 18 $\frac{1}{2}$ x10 $\frac{1}{2}$ x13 $\frac{1}{2}$, black enamel finish, each..... 7.50
Each..D.P. \$8.33 Per Dozen..D.P. \$93.33



TANK BOXES AND COVERS

Gas Tank Boxes



C-217

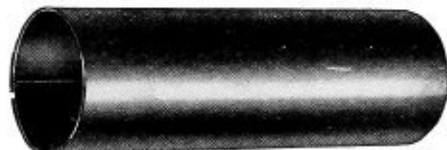
A box for B size tank, batteries and tools yet narrow enough for narrow running boards. Most cars have curved step hangers which allow the curved part of the box to extend beyond the running board into the curve of the hanger. Greatest width of this box 13 inches at $\frac{3}{4}$ above the bottom. Has canopy over tank stem to protect women's skirts, glass dial window, tool tray.

No. B-229 Combination Box, each...\$10.00
Each...D.P. \$11.11
Dozen...D.P. \$120.00



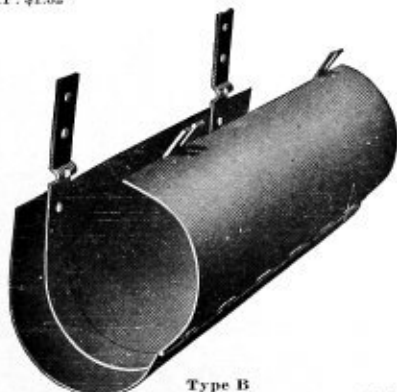
B-229 Comb

Gas Tank Covers



Type A

Type A-1. For Model B Tank, 20 inches long x 61 inches diameter, each...\$1.25
Each...D.P. \$1.32
Type A-2. For Model E Tank, 18 inches long x 61 inches diameter, each...1.25
Each...D.P. \$1.32



Type B

Type B-1. For Model B Tank, 20 inches long x 61 inches diameter, each...\$2.25
Each...D.P. \$2.44
Type B-2. For Model E Tank, 18 inches long x 61 inches diameter, each...2.25
Each...D.P. \$2.44

TRUNK BOXES AND REFRIGERATORS

Trunks



Can be attached to running board by two tee-bolts or carried at back of car. All metal, stiffened by raised beads, nickel-plated corner pieces. Toggle lock at each end. Weight 40 pounds. Holds two 30x15x7 suitcases, which are not included in the price.

Trunk Box,
30 1/2 x 14 1/2 x
16 3/16 high,
each...\$10.00
Each...D.P. \$16.66

Refrigerators

Cut shows heavy galvanized lining. Center compartment holds 25 pounds of ice. The galvanized food compartment sets over the ice on the ledge of the ice compartment. Style A has bottle compartment at each end. Style B, one compartment only. Compartments hold six pint bottles with rack or nine bottles without.



The cover has a toggle lock at each end and is removable so that it may be used as a tray. The box is attached to running board by tee-bolts. It has handles at each end so that it may be carried from the car to the lunch place.

Style A Refrigerator, 27 1/2 x 11 x 13 5/8 inches high, each...\$25.00
Each...D.P. \$41.00

Style B Refrigerator, 20 1/2 x 11 x 13 5/8 inches high, each...20.00
Each...D.P. \$33.33



Food compartment is porcelain enameled.

Bottle, or end, compartments are tinned.

A simpler style of touring refrigerator is shown above. Two end compartments hold six pint bottles each. Food compartment rests on lugs, on the sides of the end compartments. Cover, which may be used as a tray, has lock at each end, box has strong carrying handles and is attached to running board by tee-bolts, so that it may be removed and taken to the lunch place.

Style C Refrigerator Box, 22 x 9 x 13, each...\$10.00
Each...D.P. \$16.66



AUXILIARY SEATS

Folding Chairs



Back Folded Down



Completely Folded

No. 55 Child's Seat, Japanned, brown duck, each \$1.75
Seat, 9x9½-in.; height to seat, 9-in.
Each....D.P. \$2.55

No. 105 Japanned, brown duck, each 2.00
Each....D.P. \$3.00

No. 116 Oxidized art leather, each 2.50
Each....D.P. \$3.88

Size of above: Seat, 10½x11-in.; height to seat, 16-in.

No. 205 Japanned, brown duck, each 2.40
Each....D.P. \$3.55

No. 216 Oxidized, art leather, each 2.85
Each....D.P. \$4.33

Size of above: Seat, 12x12-in.; height to seat, 17-in.

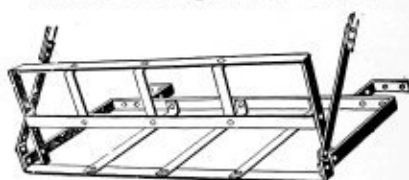
Child's Seat



No. 300 Child's Seat, Hangs back of either automobile seat or doors. Holds child securely and comfortably. Folds up when not in use. Art leather seat 9x10-in. Frame round steel, finely oxidized, each \$2.50
Each....D.P. \$3.33

TRUNKS AND TRUNK CARRIERS

Wilcox Folding Trunk Carrier



For trunks 28, 30 and 32 inches in length. Width open, 18 inches; width folded, 12 inches. In ordering state length of trunk.

No. 244 Wilcox Folding Trunk Carrier, each \$2.75
Each....D.P. \$2.77

Trunks



No. 12 Auto Case. Made of heavy black enameled duck and best quality trunk board, with steel frames, top and bottom. Edges leather bound and stitched, hinges and handles hand riveted. Solid leather corners with brass-ball-head rivets and extra large studs on bottom. Lined. Fitted with 2½-in. trays and heavy harness leather straps. With three leather trunk handles, one in front and one on each end. Size, 28x12x14-in., each \$9.00
Each....D.P. \$14.44

No. 112 Same as No. 12, only larger. Size, 30x12x14-in., each 10.00
Each....D.P. \$16.66



No. 7 Revolving Door Tire Trunk, a water-proof and dust-proof tire trunk, built on bass-wood body with heavy trunk board rim; enamel covered, felt lined; leather bound and stitched. Sizes: 24, 25, 26 or 27-in., each \$8.00
Each....D.P. \$11.11

No. 7-D Same grade as No. 7, but for demountable rims, each 9.00
Each....D.P. \$12.22



LEATHER GOODS

Crank Boots

No. 500 Crank Boots, open at end, strap $\frac{1}{2}$ x16, pocket $4\frac{1}{2}$ x1. Each \$0.50
Doz. D.P. \$7.77.



Rebound or Check Straps

Single Harness Leather

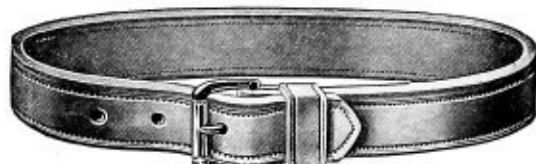


Made of highest grade harness leather. Japanned double tongue buckle sewed on.

No. 1 Rebound Strap, size $1\frac{1}{2}$ x33 inches, each \$0.80
Each D.P. \$1.33

No. 2 Rebound Strap, size $1\frac{1}{2}$ x36 inches, each 1.00
Each D.P. \$1.66

Double and Stitched Harness Leather



Made of two layers of heavy harness leather and stitched on Union Lock Stitch Machine. Japanned Double Tongue Buckle.

No. 3 Rebound Strap, size $1\frac{1}{2}$ x36 inches, each \$1.50
Each D.P. \$2.44

No. 4 Rebound Strap, size $1\frac{1}{2}$ x36 inches, each 1.75
Each D.P. \$2.77

Spring Hood Straps



The special spring used on these straps completely eliminates the usual rattle about the hood.

No. 5 Spring Hood Strap, $1\frac{1}{2}$ x58 inches, each \$2.25
Each D.P. \$3.55

No. 6 Spring Hood Strap, $1\frac{1}{2}$ x65 inches, each 2.75
Each D.P. \$4.44

Ford Spring Hood Strap



Makes the Hood Look Longer

Made especially for Ford cars.

Loop each end for fastening to frame, one spring, japanned buckle. Lock buckle if desired.

No. 7 Ford Spring Hood Strap, each \$1.25
Each D.P. \$1.88

Single Front Straps



Made of heavy harness leather, with imitation rubber trimming. Roller buckle and an 8-inch billet on upper end. Roller buckle near center. Snap on the lower end.

No. 10 Front Strap, 1x72, per pair \$2.00
Per pair D.P. \$2.77

No. 12 Front Strap, $1\frac{1}{4}$ x72, per pair 2.25
Per pair D.P. \$3.55

Double and Stitched Front Strap



Made of heavy harness leather, raised in the center, and stitched on Union Lock Stitch Machine. Imitation rubber trimming. Loop at the upper end. Roller buckle in the center. Snap on the lower end.

No. 14 Front Strap, 1x72, per pair \$2.75
Per pair D.P. \$4.40

No. 16 Front Strap, $1\frac{1}{4}$ x72, per pair 3.00
Per pair D.P. \$5.00

Round Front Straps



No. 30 Round Front Straps, black leather, with brass foot-man loops, 1x72 inches, per pair \$2.25
Per pair D.P. \$3.55

No. 31 Round Front Straps, fair leather, with brass foot-man loops, 1x72 inches, per pair 2.50
Per pair D.P. \$3.88

Miscellaneous Straps



Made of Black Harness Leather

Black Leather Straps $\frac{1}{2}$ x15, each \$0.10

Dozen D.P. \$1.80

Black Leather Straps $\frac{5}{8}$ x24, each .20

Dozen D.P. \$3.20

Black Leather Straps $\frac{5}{8}$ x30, each .25

Dozen D.P. \$3.75

Black Leather Straps $\frac{3}{4}$ x21, each .25

Dozen D.P. \$4.00

Black Leather Straps $\frac{3}{4}$ x30, each .30

Dozen D.P. \$5.00

Trunk Straps



Black Leather Trunk Straps 1x46, each \$0.60

Dozen D.P. \$10.60

Black Leather Trunk Straps 1x60, each .75

Dozen D.P. \$12.88

Black Leather Trunk Straps $1\frac{1}{4}$ x84, each 1.25

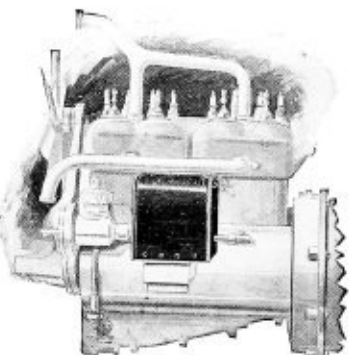
Dozen D.P. \$22.00

Magneto Covers

Leather Magneto Cover, made in blank so holes can be punched according to location of wires.

Each \$1.50

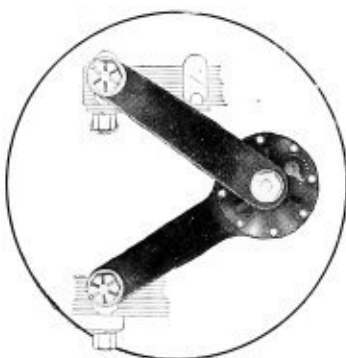
Ea. D.P. \$2.00





SHOCK ABSORBERS AND CUSHION SPRINGS

Hartford Shock Absorbers



The Improved Automatic Type

This latest Hartford Shock Absorber marks a new era in shock absorber efficiency. It automatically controls the springs of the car with just the degree of control required. Every road condition is met automatically, with the result that the car recognizes little difference between the smoothest boulevard and the roughest road.

Shocks and jolts are all along the road. They make their appearance in unexpected places. The Improved Automatic Hartford Shock Absorber meets these conditions automatically as they arise. It does not eliminate the ruts and bumps, but it absorbs the shocks and jolts. "The road is just as rough as ever—the ruts are as deep, the stones are as numerous. But the shock absorber is between yourself and the concussion. It breaks it to you gently."

You enjoy motoring comfort under all conditions of travel. "Every road becomes a boulevard." Your cars run smoothly—the wheels keep on the ground. Tires last longer. Spring breakage is minimized. The motor is no longer subjected to the excessive vibration that mars its efficiency. Comfort is assured and with it a material decrease in the cost of upkeep.

Complete Fittings

Each set of the four models is complete and ready to apply, including the special fittings and the necessary bolts, nuts, spring washers, etc., with a detailed blueprint showing the application. When ordering, mention make, model and year of car.

No. 1 Hartford Shock Absorbers, large size, for cars over 3,000 pounds, per set of four.....\$60.00
Per set of four....D.P. \$100.00

No. 2 Hartford Shock Absorbers, medium size, for cars from 2,000 to 3,000 pounds, per set of four..... 40.00
Per set of four....D.P. \$66.66

No. 3 Hartford Shock Absorbers, junior size, for cars under 2,000 pounds, per set of four..... 25.00
Per set of four....D.P. \$41.66

Special Hartford Ford Shock Absorbers, per set..... 16.00
Per set....D.P. \$26.66

Hartford Cushion Springs



Special Ford Type

Hartford Cushion Springs insure the degree of flexibility which most automobile springs lack. Designed to carry the maximum load and to meet the worst road conditions automobile leaf springs fail to give satisfactory results under minimum load conditions and at slow speeds. When the leaf spring is at rest under load it is resisting with a force exactly equal to the load, which in an automobile is the weight upon it. In a moving car an upward motion of the axle, before it can raise the body, must first overcome the inertia of the body. As the body begins to move this stored-up energy rapidly accelerates its motion.

Without the Hartford Cushion Spring practically every movement of the axle is communicated to the body when traversing minor inequalities in the road. For comfortable riding it is therefore essential that the body be not moved or deflected by slight axle movements. This is exactly what the Hartford Cushion Spring accomplishes by virtually providing the car with the most flexible of springs up to the point where the leaf springs come into action. Thus the occupants of the car ride in comfort over the smaller inequalities.

Hartford Cushion Springs for cars weighing 3,000 pounds or more, per pair.....\$35.00
Per pair....D.P. \$58.33

Hartford Cushion Springs for cars weighing 2,400 to 3,000 pounds, per pair..... 30.00
Per pair....D.P. \$50.00

Hartford Cushion Springs for cars weighing 1,800 to 2,400 pounds, per pair..... 25.00
Per pair....D.P. \$41.65

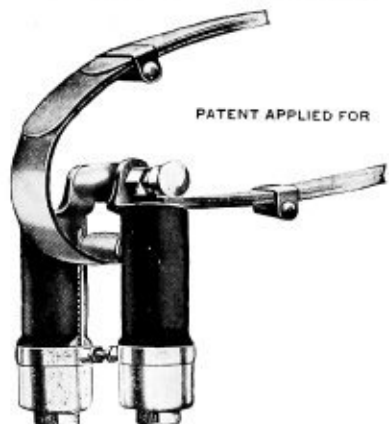
Hartford Cushion Springs for Ford, per set of four..... 12.00
Per set of four....D.P. \$20.00

Fittings furnished complete. Specify make, model, year and weight of car.



SHOCK ABSORBERS

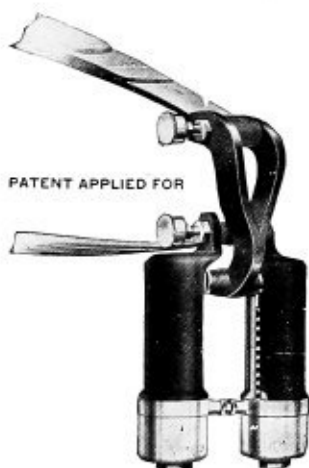
J. H. S. Shock Absorbers



PATENT APPLIED FOR

J. H. S. as attached to three-quarter elliptic springs

The mechanical principle of the J. H. S. Shock Absorber is as scientific as that of a hydro-carbon engine. A cylinder and piston are used in the J. H. S. Shock Absorber to insure durability as well as stability, there being no fragile parts to wear or easily get out of order. The piston acts in harmony with coiled springs which destroy all shocks and make every road a boulevard.



PATENT APPLIED FOR

J. H. S. as attached to full elliptic springs

They make an automobile ride with a degree of comfort not found in any other device.

Their sensitiveness of action automatically takes up and destroys jars and jolts, either heavy or light, and to the occupant of a car it seems like riding on air—fairly floating through space.

How to Order

Give name of car, year, model, weight and type of body.

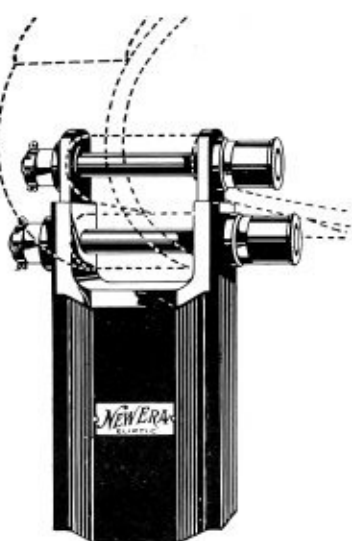
J. H. S. Twin Tube Shock Absorbers (rear only),
per pair\$25.00
Per Pair....D.P. \$41.66

New Era Shock Absorbers

A Sensational Shock Absorber Achievement

\$10.00	\$12.50	\$15.00
Small Cars	Medium Cars	Large Cars

Having in mind the reduction in price of complete automobiles to one-half and one-third their cost a few years ago, and their policy of large volume of product at reduced and honest popular price, the manufacturers of "New Era" brand auto accessories have produced from the designs of eminent French auto engineers whose schooling in easy riding problems for automobiles is admittedly years ahead of ours, the New Era Elliptic Shock Absorber, for



small, medium and heavy weight cars, having simplified construction and handsome design that will appeal to the vast number of owners needing more comfort and desiring to save the car from excessive abuse, yet without paying \$25 to \$50 for such advantage.

If good cars can now be had for one-third former price, why not good shock absorbers?

Note Construction Features and Materials.

No castings whatever. The case or outer shell is cold drawn of the best quality steel, including all working parts.

Best quality vanadium steel springs.

Best quality case hardened ground spring bolts.

Best quality screw grease cups on spring bolts.

Ease of adjustment outside for varying loads.

Long liberal bearing.

Simple and inexpensive replacement of worn bushings or parts.

Ease of attaching. Ornamental design.

Guaranteed permanently against defects.

Beautifully finished in black enamel, baked, and nickel-plated trimmings.

Model...	"A"	"A-1"	"B"	"B-1"	"C"	"C-1"
D.P.	\$10.00	\$10.00	\$12.50	\$12.50	\$15.00	\$15.00
Weight of Car—	\$16.66	\$16.66	\$20.84	\$20.84	\$25.00	\$25.00
From	2300	2300	2800	3200	3800	4000
To	2300	2500	3200	3800	4000	up
Width of Spring—	1 3/4" 2 & 2 1/4"	1 3/4" 2 & 2 1/4"	1 3/4" 2 & 2 1/4"	1 3/4" 2 & 2 1/4"	1 3/4" 2 & 2 1/4"	1 3/4" 2 & 2 1/4"
Size of Shackle Bolt—						
From 1/2 to 3/4	1/2 to 3/4	1/2 to 3/4	1/2 to 3/4	1/2 to 3/4	1/2 to 3/4	1/2 to 3/4

Packed for Parcel Post shipment. Weight per set of two, twelve pounds.

NOTE.—Each size regularly furnished with 1/2-inch shackle bolts, and if larger size is needed brass bushings to fit over shackle bolts will be furnished by jobbers of those supplying the absorbers. All will be shipped with 1/4-inch bushings to make absorbers properly fit 2-inch wide springs. When the springs are 2 1/4 inches leave out the 1/4-inch bushings. When for 1 3/4-inch springs be sure and specify 1/4-inch bushings.

The widest range of cars can be supplied with New Era Elliptic Shock Absorbers by the quick and simple change of bushings of different sizes, bolt holes and varying thickness.



BUMPERS AND DISPLAY STAND

Buckeye Champion Bumpers

Round Rail



- No. 110 Buckeye Champion Bumper, 1½-in. round black rail, black side fittings, each \$6.75
Each...D.P. \$8.11
- No. 111 Buckeye Champion Bumper, 1½-in. round nicked rail, black side fittings, each 9.00
Each...D.P. \$10.77
- No. 112 Buckeye Champion Bumper, 2-in. round black rail, black side fittings, each 11.00
Each...D.P. \$13.33
- No. 113 Buckeye Champion Bumper, 2-in. round nicked rail, black side fittings, each 12.50
Each...D.P. \$15.00

Diamond Rail



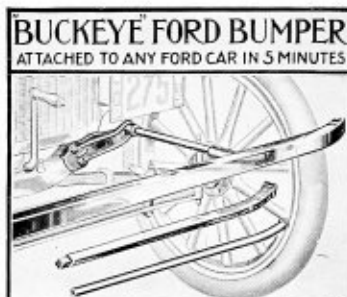
- No. 114 Buckeye Champion Bumper, 1½-in. diamond nicked rail, black side fittings, each \$12.00
Each...D.P. \$14.44
- No. 115 Buckeye Champion Bumper, 1½-in. diamond nicked rail, black side fittings, each 14.00
Each...D.P. \$16.66

Channel Rail



- No. 116 Buckeye Champion Bumper, 1½-in. channel black rail, black side fittings, each \$6.75
Each...D.P. \$8.11
- No. 117 Buckeye Champion Bumper, 1½-in. channel nicked rail, black side fittings, each 9.00
Each...D.P. \$10.77
- No. 118 Buckeye Champion Bumper, 2-in. channel black rail, black side fittings, each 8.50
Each...D.P. \$10.22
- No. 119 Buckeye Champion Bumper, 2-in. channel nicked rail, black side fittings, each 11.25
Each...D.P. \$13.55

Buckeye Ford Bumper



- No. 18 Ford Bumper, all black, 1½-in. round rail, each \$6.00
Each...D.P. \$7.22
- No. 19 Ford Bumper, all black excepting 1½-in. brass rail, each 6.75
Each...D.P. \$8.11
- No. 20 Ford Bumper, all black excepting 1½-in. nicked rail, each 7.50
Each...D.P. \$8.88
- No. 20-A Ford Bumper, all black, 1½-in. diamond rail, each 7.50
Each...D.P. \$8.88
- No. 20-B Ford Bumper, all black excepting 1½-in. brass diamond rail, each 9.00
Each...D.P. \$10.77
- No. 20-C Ford Bumper, all black excepting 1½-in. nickel diamond rail, each 9.00
Each...D.P. \$10.77
- No. 70 Ford Bumper, all black, 1½-in. channel rail, each 7.00
Each...D.P. \$8.33
- No. 71 Ford Bumper, all black excepting 1½-in. brass channel rail, each 8.50
Each...D.P. \$10.22
- No. 72 Ford Bumper, all black excepting 1½-in. nickel channel rail, each 8.50
Each...D.P. \$10.22

Buckeye Display Stand



Merchandise properly displayed is readily sold. Every dealer in bumpers should have one of these stands on which a variety of styles and finishes can be shown. Write us for terms under which these stands are to be had without cost.



FOOT WARMERS, BUMPERS AND COVERS

Clark Heaters

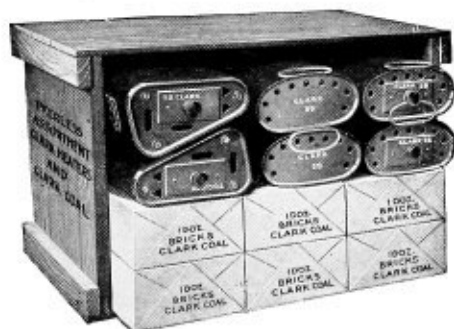


No. 3D Clark Heater

Our No. 3D Heater is one of the most popular sellers, being very strong and durable. It is 14 inches long and weighs 7 pounds. Has fine asbestos lining and is covered with Brussels carpet; has braid lining. Ends are of triple strength white metal.

Each \$2.00
Each.....D.P. \$3.93

Peerless Assortment



This assortment contains two each of the three best selling Clark Heaters and six dozen Clark Carbon Bricks, best grade.

THE CONTENTS ARE:

2—5B Clark Heaters at \$1.50.....	\$3.00
2—3D Clark Heaters at \$2.00.....	4.00
2—7D Clark Heaters at \$2.25.....	4.50
6 dozen Clark Carbon Bricks at \$0.75.....	4.50
Total List.....	\$16.00

5B Each.....D.P. \$2.48
3D Each.....D.P. 3.33
7D Each.....D.P. 3.75
Assortment.....D.P. \$26.66

Coal for Heaters



One cake will last sixteen hours with proper adjustment of drafts and keep up a steady heat; size 7½x2½x1¼ inches.

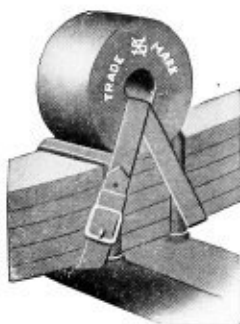
Per dozen.....\$0.75
Doz.....D.P. \$1.32

Rubber Spring Bumpers

Round

Round Rubber Bumpers, made of an excellent quality of rubber, size 3¼ inches, 1½-inch hole.

Each \$0.60
Each.....D.P. \$0.66



Oblong

Rubber Bumpers, made of good grade stock and mechanically perfect in every detail. Three sizes.

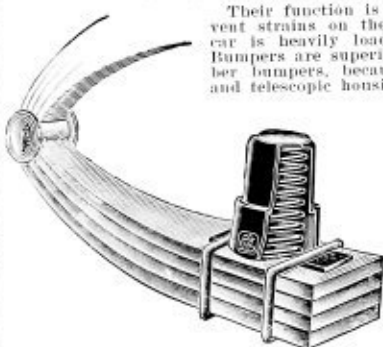
	Height Inches	Width Inches	Length Inches	Each
Rubber Bumpers, small.....	3	1½	6½	\$0.60
Each.....D.P. \$0.77				
Rubber Bumpers, medium.....	3½	1½	7½	.90
Each.....D.P. \$1.11				
Rubber Bumpers, large.....	4	1½	8½	1.20
Each.....D.P. \$1.55				

E. G. Spring Bumpers

Their function is to relieve and prevent strains on the springs when the car is heavily loaded. E. G. Spring Bumpers are superior to ordinary rubber bumpers, because the coil spring and telescopic housing offer greater resiliency and there is no disintegration.

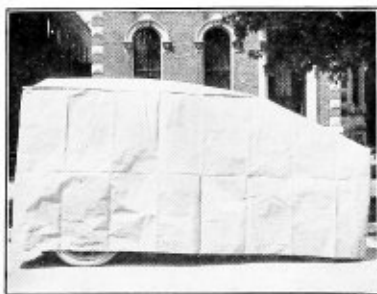
A rubber plug acts as a cushion when the springs come into contact with the spring bumper. Light, medium and heavy compression springs furnished according to model of car.

Per pair.....D.P. \$1.15



Paper Car Covers

Auto Covers made of heavy imported paper; is securely reinforced to prevent tearing and completely covers the car. Is a protection from dust, dirt, cold and moisture. Made in the following sizes:



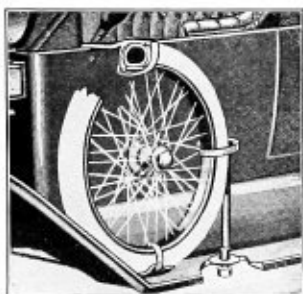
7-Passenger Size.....	\$2.50	Ford Special Size.....	1.50
Each.....D.P. \$2.22		Each.....D.P. \$1.26	
5-Passenger Size.....	2.00		
Each.....D.P. \$1.66			

Five passenger covers will cover the popular priced touring car and roadster with wheel base up to 115 inches. For larger cars the seven passenger size is preferable. Ford covers are for cars with short wheel base.



FORD TIRE HOLDERS

Ford Running Board Tire Holder



No. 115

No. 115 Running-board Tire Holders for Ford cars only and for carrying extra wire wheel or demountable rim.

Made extra heavy, the top support being turned at end and fitting over the side of the body and bolted to same directly opposite the horn bulb.

No. 115 Complete with straps.....\$3.75
Per Set.....D.P. \$4.44

Buckeye Ford Rear Tire Holder

EXTRA HEAVY TYPE

Fitting any Ford model. Carries one or two tires. Center support heavily ribbed and clamped to center of rear spring with "U" bolt which is furnished. The two side arms cast in pairs and securely fitted to center support.



No. 114

An extra curved lamp bracket is furnished which replaces the one furnished with car.

An extra rear license holder is also furnished, together with straps which makes the set fully complete. Packed in individual boxes.

No. 114. Price complete with straps.....\$3.50
Per Set.....D.P. \$4.22

Rear Ford Tire Holder

SPECIAL TYPE



No. 116

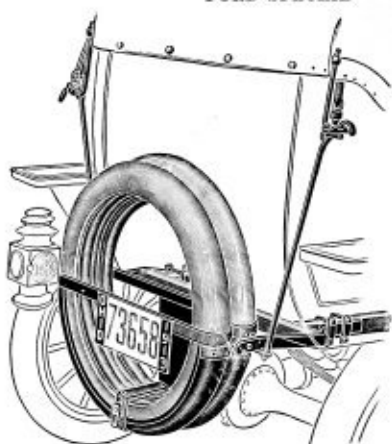
No. 116 Ford Tire Holder is carried on the rear of the car. It is attached to the heavy wood sill on each side in a few minutes' time by four 2-in. bolts which we furnish.

Arranged to carry one or two tires. Specify whether for roadster or touring car.

Price per set, separately boxed.....\$4.50
Per Set.....D.P. \$5.55

Sly Perfect Combined Lamp, Number Plate, Tire Holder and Lock

FORD SPECIAL



A Ford Special fills up the open rear. Combination Holder for Lamp and Number Plate and Tires. A saug cradle for half the tires—avoids chafing in spots—does away with hand straps, and also combines Lamp Bracket, License Number Plate Holder, and a snap lock. Looks good. Is good. Does not cost much and all Ford owners are real prospective buyers because "convenience, common sense and economy," all in one, sounds reasonable to every man.

No. G1 Sly Perfect Ford Tire Holders (rear) for one tire, 30x3½ in., each.....\$4.00
Each.....D.P. \$6.66

No. G2 Sly Perfect Ford Tire Holders (running board) for one tire, 30x3½ in., each.....3.75
Each.....D.P. \$6.24

No. G3 Sly Perfect Ford Tire Holders (rear) for two tires, 30x3½ in., each.....5.50
Each.....D.P. \$9.15

No. G4 Sly Perfect Ford Tire Holders (running board) for two tires, 30x3½ in., each.....5.00
Each.....D.P. \$8.33

Victor Tire Carriers for Ford

The Victor, a complete metal case for carrying tires.

These carriers are made in three pieces to fit the tires, an outer circular case in two half sections and a one-piece circular cover, slightly smaller than the tire rim, to admit of easy insertion of the tires, and when assembled it forms a protective carrier in the fullest sense of the term, and tires may be inserted and completely closed up in two minutes. The lower semi-circular section may be secured to the running board or at the rear of the car, as desired. Suitable attaching brackets, necessary bolts and full instructions will accompany each carrier. Any one who can use a carpenter's brace and bit can attach this to the rear of the car in twenty minutes.

In ordering, give date of car, 1911-12-13 or 1914-15, as attaching brackets vary for the two models. Two padlocks furnished with each carrier. On rear carrier provision is made to carry tail lamp and license number, as shown.

Shipping weight, 40 pounds.

No. FR Victor Ford Tire Carriers (rear) for two tires, 30x3½ in., each.....\$10.00
Each.....D.P. \$13.91

No. FS Victor Ford Tire Carriers (running board) for two tires, 30x3½ in., each.....10.00
Each.....D.P. \$13.90





TIRE HOLDERS

"Badger" Standard Running Board

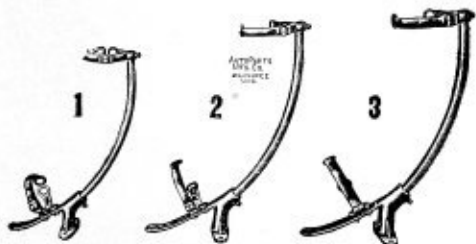


Our Tire Holders are all finished in our famous black rubber. Bolts, washers and straps are furnished for attaching. Each set is shipped in a strong box so they can be sent by parcel post or express without repacking.

No. 0 and No. 1 are especially adapted for Ford cars. No. 2 will carry tires in sizes up to 4½ in. No. 3 is especially adapted for heavy demountables. All our holders will carry two demountables or casings, with the exception of No. 0 which carries one only.

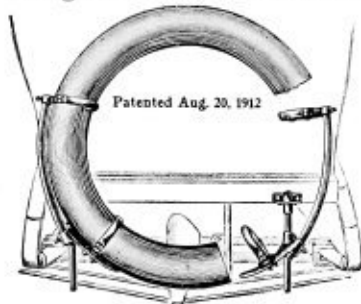
No. 0 Badger Running Board Tire Holders, black, for one tire, per set.....	\$2.20
Per Set.....D.P.	\$3.32
No. 1 Badger Running Board Tire Holder, black, for two tires, per set.....	2.80
Per Set.....D.P.	\$4.22
No. 2 Badger Running Board Tire Holder, black, for two tires, per set.....	3.80
Per Set.....D.P.	\$5.55
No. 3 Badger Running Board Tire Holder, black, for two tires, per set.....	4.00
Per Set.....D.P.	\$6.11

The following illustrations show the difference in size of side arms of the Badger Running Board Tire Holder.



For convenience in ordering, we have numbered these Running Board Tire Holders as per above cut. No. 1 will take any tire up to 3½ in. No. 2 any tire up to 5½ in. and will also carry 3½-in. demountables. No. 3 is specially designed to carry demountable rims up to 5½ in. All these holders will carry two tires or rims if desired.

"Badger" Standard Rear End

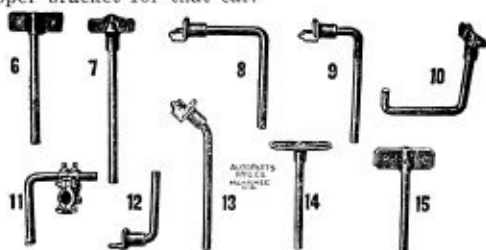


All Rear End Tire Holders are finished and packed in the same manner as the running board tire holders.

No. 4 is a clamp-on type for Ford cars. Nos. 5 and 6 are also intended for Ford cars, either for roadster or touring. No. 7 will carry tires up to 4½ in. and No. 8 is adapted for heavy demountables.

No. 4 Badger Rear Tire Holder, black, for two tires, per set.....	\$2.50
Per Set.....D.P.	\$3.88
No. 5 Badger Rear Tire Holder, black, for one tire, per set.....	3.30
Per Set.....D.P.	\$5.00
No. 6 Badger Rear Tire Holder, black, for two tires, per set.....	3.80
Per Set.....D.P.	\$5.50
No. 7 Badger Rear Tire Holder, black, for two tires, per set.....	4.80
Per Set.....D.P.	\$7.22
No. 8 Badger Rear Tire Holder, black, for two tires, per set.....	5.60
Per Set.....D.P.	\$8.33

The following illustrations show the different shaped brackets that can be furnished with Badger Rear End Tire Holders. If in ordering you will specify the cars on which the holders are to be used, we will send the proper bracket for that car.



Bracket No. 6 fits Overland, Buick, American Traveler and all cars built similar.

Bracket No. 7 fits 80% standard cars.

Bracket No. 8 fits Rambler Cross Country, Peerless Model 48 and all cars built similar.

Bracket No. 9 fits Franklin, Palmer, Singer and all cars built similar.

Bracket No. 10 fits Imperial, Peerless, Columbia Knight.

Bracket No. 11 fits Stutz, Packard, Amplex, Apperson and all cars built similar.

Bracket No. 12 fits Simplex, Knox Model "S" and all cars built similar.

Bracket No. 13 fits Roadsters like Overland No. 61, Warren and all cars built similar.

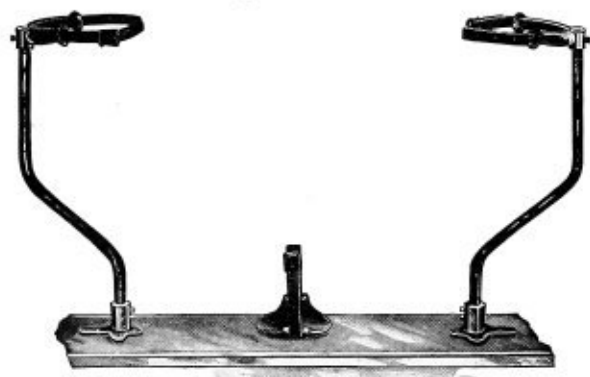
Bracket No. 14 fits Ford Model "T" touring car and all cars built similar.

Bracket No. 15 fits Ford Model "T" Torpedo Runabout, or Commercial Roadster and cars built similar.



TIRE HOLDERS

Running Board Tire Holder



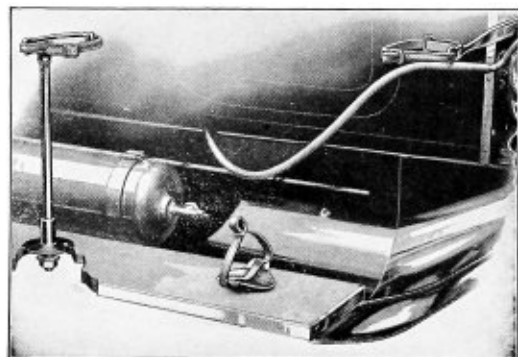
No. 94

The No. 94 Tire Holders, complete, a set of 3 pieces with straps for Tires up to 3½ inches. Attach to running board only.

Per set, Black Enameled.....\$2.00
Per Set...D.P. \$2.44

No. 95 Tire Holders, complete as illustrated above, excepting a running board support is furnished arranged for a lock should user desire it.

Per set, with two straps.....\$2.75
Per Set...D.P. \$3.33



These Holders made extra heavy for carrying demountable rims if desired.

Furnished as illustrated, but two upright arms as one shown on running board will be furnished if specified on order.

No. 108. For one tire, Black Enameled with 3 Straps.....\$3.75

Per Set...D.P. \$4.44

No. 108½. Same as No. 108 excepting for two tires.\$5.50

Per Set...D.P. \$6.66

Running Board Tire Holder



A light weight Running Board Tire Holder for one tire that is suitable for all light weight cars carrying 3" or 3½" tires. It is contained entirely on the running board, which obviates the necessity of drilling holes in the frame or otherwise marring the car. Is finely finished and one of the best designed holders on the market.

No. 64. Tire Holders, Black Hard Rubber Finish, per set.....\$3.00
Pet Set...D.P. \$3.33

No. 86. Similar to No. 64, but made to carry two tires, per set.....3.50
Per Set...D.P. \$3.88

No. 68 Tire Holder



This Holder is especially designed for light cars, for those wishing a light but strong, fully contained running board tire holder. It will accommodate one or two 3½" or 4" tires, is very rigid, well made, and finished like our other products.

No. 68. Tire Holders, Black Hard Rubber Finish, per set.....\$3.75
Per Set...D.P. \$5.00

No. 48 Tire Holder

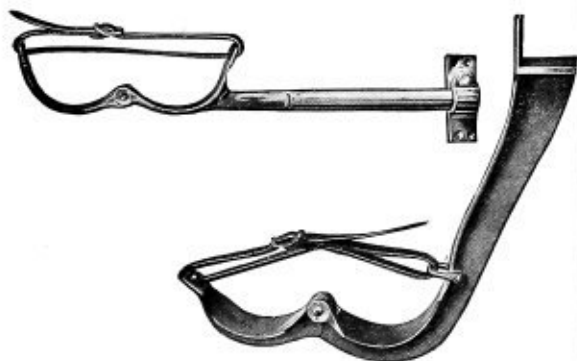
Similar in design to No. 68.
No. 48. Tire Holders, Black Hard Rubber Finish, per set.....6.00
Per Set...D.P. \$8.33

This Holder was especially designed for torpedo or fore door body car and is made to carry one or two 4½-inch or 5-inch tires. It is entirely contained on the running board, which obviates the necessity of drilling holes in the frame or otherwise marring the car. Is strongly and finely made, and finished in the best possible manner.



TIRE HOLDERS

Rear Tire Holders



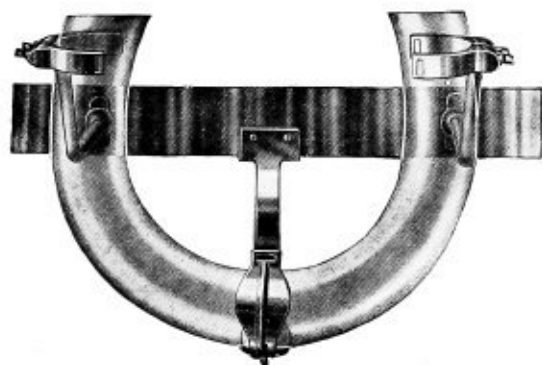
No. 540 Tire Holders with two Side Arms and 9-inch Hook, Black Enamel Finish, complete with straps, per set\$3.50

Per Set..D.P. \$4.22

No. 544 Tire Holders with two Side Arms and 12-inch Hook. Black, complete with straps, per set 3.50

Per Set..D.P. \$4.22

Rear Tire Holders



Suitable for 3½, 4 or 4½-inch tires.

No. 5962 Rear Tire Holders. Black Hard Rubber Finish, 9-inch drop, per set.....\$6.00

Per Set..D.P. \$8.88

No. 5962 Rear Tire Holders. Black Hard Rubber Finish, 11-inch drop, per set 6.00

Per Set..D.P. \$8.88

Rear Tire Holders



For 1 or 2 Demountable Rims.

This holder was designed to meet the demand for a Rear Tire Holder suitable for carrying rims or tires. Is very strong and guaranteed to carry two demountable rims of any size. The top arm being adjustable makes it adaptable for rims or tires 34" or larger. Is easily attached to the outside of rear cross member of frame, which makes it very rigid.

No. 88 Rear Tire Holders. Black Hard Rubber Finish, per set\$14.00
Per Set..D.P. \$17.22



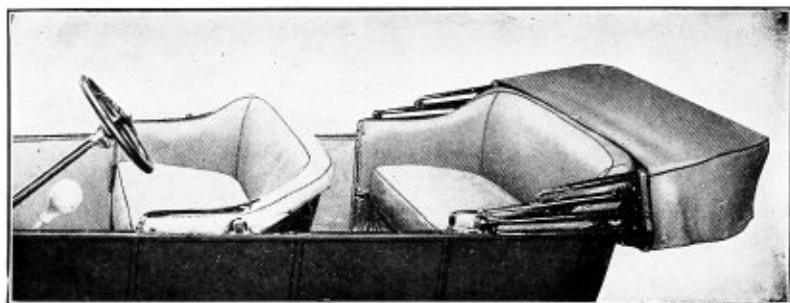
This rear Tire Holder can be attached to the rear frame cross member of nearly any car, and with the adjustable side arms, this set can be made to accommodate any size tire. The tire safety lock on the rear piece insures the owner from theft of tires in garages or public places. It is substantially made of forged steel, very rigid and of a practical design.

No. 38 Rear Tire Holder. Black Hard Rubber Finish, per set\$7.50
Per Set..D.P. \$12.22



GIBSON QUALITY SEAT COVERS

Gibson Quality Slip Covers are Both Luxurious and Economical



Gibson Quality Seat Covers

Are Not an Experiment

We were the first to manufacture and ship out seat covers for others to attach to the cars. We commenced on this line five years ago. Our output has now grown to many thousand sets annually.

We give particular attention to the manufacture of seat covers. We are experts in this line, therefore can furnish better goods, greater value and render better service than any one else.

Our covers are tailor-made and perfect fitting. We have an advantage over all competitors in regard to fitting, as we are daily selling seat covers for all types of cars in our own factory (several hundred each year). Thus we are able to know they fit. Further, we guarantee a fit, and do not hesitate to ship subject to approval.

Gibson Quality Slip Covers

Give the Finishing Touch that Sells Your Cars

They dress the car.

They add comfort.

They are indispensable to cleanliness.

They keep the oil of the leather off your clothes.

They cover the pleats and tufts in the original upholstery, which are receptacles for dust and dirt that will continually work out and soil clothing.

The seat covers can be dusted in a moment's time and nearly all our materials now used can be dry-cleaned or washed.

They make the new car look the part.

They make an old car look like new.

When your old car is repainted do not fail to put in seat covers and thus complete the job.

A set of Gibson Quality Seat Covers consists of covering for backs, cushion doors and panels.

Top dust hoods must be specified for separately.

Buttons, with screw studs and all necessary tacks, buckles and laces are included.

The screw studs have slotted heads and can be quickly and easily driven in with a screwdriver.

Full and complete directions for putting on are furnished with each set.

The covers can quickly be detached and taken out for cleaning.

The smooth fit of Gibson Quality Seat Covers is the feature that makes them superior to all others. Properly put on they will not show a wrinkle.

Materials

We use only such materials as our experience has taught us to be the best.

Nos. 1 and 5 are serge combined with rubber coating to drill. They present a handsome appearance and can be cleansed with soap and brush.

Nos. 2, 7 and 8 are single fabrics which will not fade or wear through and can be dry cleaned.

No. 3 is jeans combined to drill with a coating of rubber between. It has been in great demand and has become a staple. It gives good service, but will fade.

No. 8 is two fabrics woven together. It can be dry cleaned, will not fade or wear through and is by far the most serviceable seat cover fabric. We recommend it strongly.

All seat covers shown in this list will have arm rests made of the best quality patent leather. The welts and bindings of the heaviest and best Chase leather.

It is not our policy to list cheap and inferior goods that will not give satisfaction to the car owner or do credit to us as manufacturers.



THE GIBSON COMPANY

INDIANAPOLIS



163

GIBSON QUALITY SEAT COVERS



We list below a selected line of covers for various cars. We are in a position to furnish the Gibson Quality Covers for many cars not listed. Send us your orders and we will furnish your requirements.

We list below a selected line of covers for various cars. We are in a position to furnish the Gibson Quality Covers for many cars not listed. Send us your orders and we will furnish your requirements.

		Material	
Type of Car	Size of Car	Model	No. 3 No. 1, 2, 5, 7, 8
Buick 24.....	2 pass.	1913	\$11.50 \$13.00
Buick 30.....	2 pass.	1913	12.50 15.00
Buick 35.....	2 pass.	1913	24.25 26.25
Buick 31.....	5 pass.	1913	29.25 33.75
Buick 40.....	5 pass.	1913	33.00 37.50
Buick B24.....	2 pass.	1914	11.50 13.00
Buick B36.....	2 pass.	1914	12.75 15.00
Buick B25.....	5 pass.	1914	18.50 23.50
Buick B37.....	5 pass.	1914	20.00 25.00
Buick B35.....	5 pass.	1914	23.00 30.00
Buick C24.....	2 pass.	1915	9.50 11.50
Buick C36.....	2 pass.	1915	10.50 12.50
Buick C25.....	5 pass.	1915	16.00 20.50
Buick C37.....	5 pass.	1915	18.25 22.00
Buick C55.....	7 pass.	1915	21.00 26.00
Cadillac.....	5 pass.	1912	24.00 30.00
Cadillac.....	4 pass.	1913	24.00 30.00
Cadillac.....	5 pass.	1913	24.00 30.00
Cadillac.....	2 pass.	1913	12.00 15.00
Cadillac.....	2 pass.	1914	12.00 15.00
Cadillac Phaeton.....	4 pass.	1914	21.00 28.00
Cadillac.....	5 pass.	1914	21.00 28.00
Cadillac.....	7 pass.	1914	24.00 31.00
Cadillac.....	5 pass.	1915	21.00 28.00
Cadillac.....	7 pass.	1915	24.00 31.00
Cadillac.....	5 pass.	1915	12.00 15.00
Chalmers.....	2 pass.	1913	30.00 36.00
Chalmers.....	2 pass.	1914	15.00 18.75
Chalmers.....	5 pass.	1914	27.00 32.00
Chalmers.....	7 pass.	1914	30.00 34.00
Chalmers 26A.....	"Light Six".....	4 pass.	1915 27.00 30.00
Chalmers 25B.....	"Light Six".....	4 pass.	1915 27.00 30.00
Chalmers 26B.....	"Light Six".....	6 pass.	1915 27.00 34.00
Chalmers 26B Big Six.....	7 pass.	1913	28.00 36.50
Cole.....	6 pass.	1914	33.00 41.25
Cole.....	7 pass.	1914	33.00 41.25
Cole Model 10.....	5 pass.	1915	21.00 26.00
Chevrolet.....	2 pass.	1914	12.00 13.00
Crow.....	5 pass.	1914	24.00 33.00
Dodge.....	5 pass.	1915	15.00 20.00
Empire.....	2 pass.	1914	12.00 15.00
Empire.....	5 pass.	1914	21.00 26.25
Empire.....	2 pass.	1915	12.00 15.00
Empire.....	5 pass.	1915	18.00 21.00
Top Dust Hoods to match.....			4.50 6.00
Ford Roadster.....		1911	8.00 10.50
Ford Touring.....		1911	12.00 18.75
Ford Roadster.....		1912	8.00 10.50
Ford Tourabout "Low Panel".....		1912	14.00 18.75
Ford Touring.....		1912	14.00 18.75
Ford Roadster.....		1913	7.75 10.50
Ford Touring.....		1913	14.00 16.25
Ford Roadster.....		1914	6.50 8.50
Ford Touring.....		1914	10.50 15.00
Ford Top Dust Hoods to match.....			3.50 4.25
Ford Roadster.....		1915	6.00 9.00
Ford Touring.....		1915	10.50 15.00
Ford Top Dust Hoods to match.....			3.50 4.25
Flanders 20.....	2 pass.	1912	12.00 15.00

		Material	
Type of Car	Size of Car	Model	No. 3 No. 1, 2, 5, 7, 8
Hudson 6-40.....	5 pass.	1914	\$27.00 \$30.00
Hudson 6-54.....	7 pass.	1914	30.00 33.75
Hudson 6-40.....	2 pass.	1915	12.50 15.00
Hudson 6-40.....	5 pass.	1915	24.00 30.00
Hudson 6-54.....	7 pass.	1915	30.00 33.75
Hupmobile 20.....	2 pass.	1912	9.00 12.00
Hupmobile 32.....	2 pass.	1912	12.00 15.00
Hupmobile 32.....	2 pass.	1913	9.00 12.00
Hupmobile 32.....	2 pass.	1914	9.75 12.00
Hupmobile Mo. K.....	2 pass.	1915	9.75 12.00
Hupmobile 32.....	5 pass.	1912	18.00 24.00
Hupmobile 32.....	5 pass.	1913	18.00 24.00
Hupmobile 32.....	5 pass.	1914	18.00 24.00
Hupmobile 32.....	6 pass.	1914	21.00 26.25
Hupmobile Mo. K.....	5 pass.	1915	18.00 21.00
Haynes.....	5 pass.	1913	28.00 36.00
Haynes Light Six.....	5 pass.	1915	28.00 36.00
Haynes 30 Light Six.....	2 pass.	1915	15.00 18.00
Haynes 31 Big Six.....	5 pass.	1915	30.00 36.00
Haynes 32 Big Six.....	5 pass.	1915	30.00 36.00
Krit Touring.....		1912	24.00 30.00
Krit Touring.....		1913	24.00 30.00
Krit Touring.....		1914	24.00 30.00
Lambert 36 Touring.....		1914	33.00 40.00
Lambert 60 Touring.....		1914	33.00 40.00
Little Four.....	2 pass.	1913	11.00 14.00
Marion 48A.....	5 pass.	1913	36.00 41.25
Marion 37A.....	5 pass.	1913	36.00 41.25
Marion 5B.....	5 pass.	1914	36.00 41.25
Maxwell 25.....	5 pass.	1914	18.00 21.00
Maxwell 35.....	5 pass.	1914	24.00 28.00
Maxwell 6-50.....	7 pass.	1914	28.00 33.75
Maxwell 25.....	2 pass.	1914	12.00 15.00
Maxwell 25.....	5 pass.	1915	15.00 18.00
Overland 59T.....	5 pass.	1912	24.00 28.00
Overland 69T.....	5 pass.	1913	22.00 26.25
Overland 69TC.....	5 pass.	1913	22.00 26.25
Overland 69T.....	5 pass.	1913	22.00 26.25
Overland 71T.....	5 pass.	1913	24.00 30.00
Overland 79R.....	2 pass.	1914	9.50 11.75
Overland 79T Early Model.....	5 pass.	1914	19.00 24.00
Overland 79T Late Model.....	5 pass.	1914	19.00 24.00
Overland 81.....	5 pass.	1915	16.50 23.00
Overland 80.....	5 pass.	1915	15.00 20.50
Overland 81.....	2 pass.	1915	12.00 15.00
Overland 80.....	2 pass.	1915	9.00 12.00
Oakland 42.....	5 pass.	1913	28.00 33.75
Oakland 36.....	5 pass.	1914	28.00 30.75
Oakland 43.....	5 pass.	1914	28.00 30.75
Oakland 48.....	5 pass.	1914	28.00 30.75
Oakland 37.....	5 pass.	1915	19.00 23.50
Paige 36.....	5 pass.	1914	23.00 27.00
Paige 25.....	5 pass.	1914	21.00 26.25
Paige 36.....	5 pass.	1915	21.00 26.25
Paige 25.....	5 pass.	1915	20.00 24.00
Paige 36.....	2 pass.	1915	13.00 16.00
Premier.....	5 pass.	1913	33.00 41.25
Premier.....	7 pass.	1913	36.00 45.00
Reo 5th.....	5 pass.	1913	23.00 28.00
Reo 5th.....	2 pass.	1914	15.00 18.00
Reo 5th Spring 8.....	5 pass.	1914	23.00 28.00
Reo 5th Fall 8.....	5 pass.	1914	23.00 28.00
Reo.....	5 pass.	1915	21.00 25.00
Reo.....	7 pass.	1915	33.75 37.50
Regal.....	5 pass.	1915	22.00 26.00
Regal.....	2 pass.	1915	12.00 15.00
Saxon.....	2 pass.	1914	7.50 10.50
Saxon.....	2 pass.	1915	7.50 10.50
Saxon.....	5 pass.	1915	15.00 18.00
Stutz Model E.....	2 pass.	1914	18.00 21.00
Stutz Model E.....	6 pass.	1914	28.00 33.75
Stutz Model F.....	2 pass.	1915	18.00 21.00
Stutz Model F.....	6 pass.	1915	28.00 33.75
Stutz Bulldog.....	4 pass.	1915	24.00 28.00
Studebaker 20.....		1912	15.00 18.00
Studebaker EMF 30.....	5 pass.	1911	21.00 26.25
Studebaker EMF 30.....	5 pass.	1912	26.25 30.00
Studebaker 25.....	5 pass.	1913	21.00 26.25
Studebaker 25.....	5 pass.	1913	26.00 30.00
Studebaker Four.....	5 pass.	1914	18.75 24.00
Studebaker Six.....	6 pass.	1914	26.00 30.00
Studebaker Four.....	2 pass.	1915	12.00 15.00
Studebaker Four.....	5 pass.	1915	16.00 20.50
Studebaker Six.....	5 pass.	1915	18.00 22.00
Studebaker Six.....	7 pass.	1915	21.00 27.50
Top Dust Hoods to match.....			4.50 6.00

SPECIAL DISCOUNT APPLIES TO PRICES ON THIS PAGE



HOOD HARDWARE AND BODY TRIMMINGS



Style G



Style H

Hood Fasteners

Style G Hood Fasteners,
black enamel finish, ea. \$0.50
Dozen....D.P. \$8.88

Style H Hood Fasteners,
same as G except heavier for trucks, black
enamel finish, each.....\$1.00
Dozen....D.P. \$17.77



Style M



Style A

Style M Hood Fasteners, no spring used, for all
cars, black enamel finish, each.....\$0.30
Dozen....D.P. \$5.33

Style A Hood Fasteners, small size, black enamel
finish, each......60
Dozen....D.P. \$10.66

Style A Hood Fasteners, large size, for truck,
black enamel finish, each......90
Dozen....D.P. \$16.00

Hood Handles



No. 6

No. 6 Hood Handle. A highly polished, nicely finished casting, black enamel finish, each.....\$0.18
Dozen....D.P. \$3.20



No. 7

No. 7 Hood Handle. Made from $\frac{3}{8}$ -in. steel rod,
black enamel finish, each.....\$0.25
Dozen....D.P. \$4.44

Door Handles



No. 440

No. 440 Nickered Door Handles, $3\frac{1}{4}$ -in. opening,
per pair\$2.00
Per pair....D.P. \$2.22



No. 430

No. 430 Nickered Door Handles, $3\frac{1}{4}$ -in. opening,
per pair\$2.00
Per pair....D.P. \$2.22



No. 450

No. 450 Nickered Door Handles, $3\frac{1}{4}$ -in. opening,
per pair\$2.00
Per pair....D.P. \$2.22



No. 506

No. C-506 Japanned Footman Loops for 1- and
 $1\frac{1}{4}$ -in. straps, each\$0.10
Dozen....D.P. \$0.55



TOP FITTINGS

Curtain Fasteners



No. 200 Curtain Fasteners, single, black finish, per doz.....\$0.75
Doz.....D.P. \$0.88

No. 201 Curtain Fasteners, single, nickel finish, per doz......85
Doz.....D.P. \$1.10

No. 202 Curtain Fasteners, double, black finish, per doz.....\$0.85
Doz.....D.P. \$1.10

No. 203 Curtain Fasteners, double, nickel finish, per doz..... 1.00
Doz.....D.P. \$1.32



No. 204 Clinch Curtain Fasteners, black, per doz.....\$0.75
Doz.....D.P. \$0.88

No. 205 Clinch Curtain Fasteners, nickel, per doz..... 1.00
Doz.....D.P. \$1.10

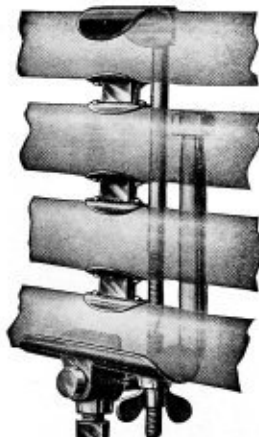


Gemco Bow Rest



No. G-1 Gemco Bow Rest, $\frac{1}{2}$ -in. hole, black, per pair \$0.75
Per Doz. Pr.....D.P. \$8.00
No. G-2 Gemco Bow Rest, $\frac{1}{4}$ -in. hole, black, per pair .75
Per Doz. Pr.....D.P. \$8.00

"Ever Tight" Clamp Bow Holder



This Bow Holder consists of a long perch fastened to a hanger with a set screw. The securing anchor, which has a spring washer under it, is placed through a hole in a lug on the inside of the perch.

When the top is up the thumb nut is screwed up firmly against the upper nut so it can not rattle. When the top is let down the securing anchor draws the bows tightly together by the use of the thumb nut.

No. 1 for three and four bow tops.

No. 2 for five bow tops.

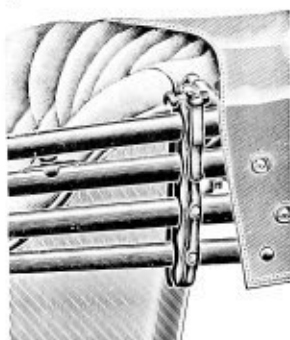
Finish: Hard rubber, black enamel.

No. 1 Ever Tight Clamp Bow Holders, $\frac{1}{4}$ -in. hole \$1.50
No. 1 Ever Tight Clamp Bow Holders, $\frac{1}{2}$ -in. hole 1.50
No. 2 Ever Tight Clamp Bow Holders, $\frac{1}{4}$ -in. hole 1.50
No. 2 Ever Tight Clamp Bow Holders, $\frac{1}{2}$ -in. hole 1.50
Per Pair.....D.P. \$1.88

Bair Top Holders



Model A
Standard Type



Car Equipped with Bair
Top Holders

Black rubber enamel finish. Has lug for attaching to body iron socket with $\frac{3}{8}$ -inch iron. Can be attached to any car.

Model A Bair Top Holders, 3-bow, per pair.....\$3.25
Per Pair.....D.P. \$4.66
Model A Bair Top Holders, 4-bow, per pair..... 3.50
Per Pair.....D.P. \$5.00
Model A Bair Top Holders, 5-bow, per pair..... 3.75
Per Pair.....D.P. \$5.33

Sheet Celluloid



Sheet Celluloid for Storm Fronts and Curtains. Sheets 20 x 50 inches.

Each\$1.50
Each.....D.P. \$2.22

Cotton Waste



Red Roll Auto Waste, a specially selected long fibre clean cotton waste in pound packages.

Each\$0.35
Dozen.....D.P. \$4.22
Double Extra, a special quality long fibre waste, in 100-lb. bales, per pound......33
Per Pound.....D.P. \$0.31
Double Extra Waste, in 25 or 50-lb. bales, per pound......35
Per Pound.....D.P. \$0.33
B. White Waste, a very satisfactory grade, in 100-lb. bales, per pound......30
Per Pound.....D.P. \$0.22
B. White Waste, in 25 or 50-lb. bales, per pound.... .32
Per Pound.....D.P. \$0.25



GREASE BOOTS, RAINCOATS AND LAMP COVERS

Universal Joint Boot



Made of Harness Leather

- No. 1 Universal Joint Boot, small, each.....\$0.90
Each.....D.P. \$1.33
No. 2 Universal Joint Boot, large, each.....1.10
Each.....D.P. \$1.66

Knuckle Boot



- No. 1 Knuckle Boot,
small, each.....\$0.40
Each.....D.P. \$0.66
No. 2 Knuckle Boot,
large, each......50
Each.....D.P. \$0.84

End Thrust Boot



- No. 1 End Thrust
Boots, 7-inch, each.....\$0.50
Each.....D.P. \$0.80
No. 2 End Thrust
Boots, 8-inch, each......60
Each.....D.P. \$0.88

Overland



Makes it possible to pack the joints of the steering gear with grease, thereby eliminating rattle and wear.
Overland Grease Boots in set of 4, per set.....\$1.10
Per set.....D.P. \$1.80

"Ford"



Three to a set—complete with laces. Made of waterproof leather. These boots make it possible to pack the joints with grease, which does away with the wear and therefore eliminates rattle. Makes it easier to steer.
Ford Grease Boots in sets of 3, per set.....\$1.00
Per set.....D.P. \$1.66

Hodgman Coats

Style No. 2270:VK 137

Herewith is the popular military style, single breasted, buttoned through vertical pockets and tabs on sleeves. It is made of a fine double texture Cantonette fabric.

- Each.....\$10.00
Each.....D.P. \$15.55

Style No. 2270:VK 257

The material is a fine Olive Cashmere with a plaid lining.

- Each.....\$11.00
Each.....D.P. \$17.22

Style No. 2458:VK 249

This model is built on the same lines as the No. 2454 except more complete in details. The outer appearance is the same. The material is a fine quality of Olive Cashmere backed with itself.

- Each.....\$12.00
Each.....D.P. \$19.44

Style No. 2458:VK 281

Men's Slip-on

The fabric used in this coat is an extra fine all-wool Olive Cashmere lined with a fine quality of silk to match the face material.

- Each.....\$15.00
Each.....D.P. \$24.44

Style No. 2270:VK 87

The fabric used is a double texture all-wool extra Cashmere backed with itself.

- Each.....\$15.00
Each.....D.P. \$24.44

Style No. 2315:VK 186 Men's Slip-on

This is an extra large sweep full room coat made with military collar, with tabs at wrist and vertical pockets. The material is an imported Recceda all-wool Canton lined with a plaid lining to match.

- Each.....\$19.00
Each.....D.P. \$35.55

Style No. 2260:VK 29 Men's Auto Coat

This is a special desirable coat for chauffeurs' use on account of the storm fly front construction which extends to the bottom. It has a close fitting military storm collar with tabs at wrist and a small change pocket on left sleeve. It has a large pocket with a flap on right sleeve and the material is a fine Olive shade of Jeans.

- Each.....\$7.75
Each.....D.P. \$12.77

Gordon Lamp Covers "Fits all" Headlights



Will fit all headlights, flare front, with or without bale, bullet, and search or cylinder lamps, rigid or swinging bracket; better than any other lamp cover. Made in only three sizes.



When ordering give diameter of front glass.
6 to 8-inch 8 to 10-inch 10 to 12-inch

- No. 1135 Rubber Drill, each.....\$0.90
Each.....D.P. \$1.00
No. 1138 Rubber, cotton flannel lined, each.....\$1.40
Each.....D.P. \$1.28



MIRRORS

Diminishing Mirror



Convex reflectors focus wide range of vision; stamped metal frame integral with corrugated dome back; swivel adjustable joint in back; clamps on windshield; clamp adjustable to all angles. Twelve-inch rod.

		Each
No. 1 Diminishing Mirror, 2½-in., nickel finish.....		\$1.00
Each.....D.P. \$1.48	Dozen.....D.P. \$16.00	
No. 10 Diminishing Mirror, 2½-in., black finish.....		1.00
Each.....D.P. \$1.48	Dozen.....D.P. \$16.00	
No. 2 Diminishing Mirror, 4-in., nickel finish.....		1.20
Each.....D.P. \$1.77	Dozen.....D.P. \$19.20	
No. 20 Diminishing Mirror, 4-in., black finish.....		1.20
Each.....D.P. \$1.77	Dozen.....D.P. \$19.20	
No. 3 Diminishing Mirror, 5½-in., nickel finish.....		1.45
Each.....D.P. \$2.11	Dozen.....D.P. \$22.77	
No. 30 Diminishing Mirror, 5½-in., black finish.....		1.45
Each.....D.P. \$2.11	Dozen.....D.P. \$22.27	

Plain Beveled Mirror

Round French plate beveled mirror; stamped separable tubular frame, secured by set screws; sheet metal back; adjustable swivel joint in back; clamps on windshield or dash; 9-in. rod.



		Each
No. 4 Plain Beveled Mirror, 5½-in., nickel finish.....		\$1.90
Each.....D.P. \$2.82	Dozen.....D.P. \$31.11	
No. 40 Plain Beveled Mirror, 5½-in., black finish.....		1.90
Each.....D.P. \$2.82	Dozen.....D.P. \$31.11	

Oval Mirror



Oval French plate beveled mirror. The same in construction as the square mirror.

		Each
No. 6 Oval Mirror, 5x7, nickel finish.....		\$3.35
Each.....D.P. \$5.00	Dozen.....D.P. \$54.00	
No. 60 Oval Mirror, 5x7-in., black finish.....		3.35
Each.....D.P. \$5.00	Dozen.....D.P. \$54.00	
No. 6-F Oval Mirror, 5x7-in., with flat bracket, nickel finish.....		3.35
Each.....D.P. \$5.00	Dozen.....D.P. \$54.00	
No. 60-F Oval Mirror, 5x7-in., with flat bracket, black finish.....		3.35
Each.....D.P. \$5.00	Dozen.....D.P. \$54.00	

Square Mirror



Square French plate beveled mirror; stamped separable tubular frame; corrugated dome back; ball socket joint and adjustable hand nut; 4½-in. adjustable telescopic rod and 4½-in. extension arms; clamps on windshield or dash.

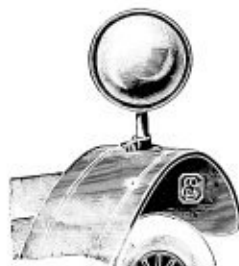
		Each
No. 5 Square Mirror, 5x7-in., nickel finish.....		\$3.35
Each.....D.P. \$5.00	Dozen.....D.P. \$54.00	
No. 50 Square Mirror, 5x7-in., black finish.....		3.35
Each.....D.P. \$5.00	Dozen.....D.P. \$54.00	
No. 5-F Square Mirror, 5x7-in., with flat bracket, nickel finish.....		3.35
Each.....D.P. \$5.00	Dozen.....D.P. \$54.00	
No. 50-F Square Mirror, 5x7-in., with flat bracket, black finish.....		3.35
Each.....D.P. \$5.00	Dozen.....D.P. \$54.00	

Flat Mirror Bracket



This is the Flat Ribbed Clamp for attaching Nos. 5-F, 50-F, 6-F and 60-F mirrors to square windshield frames, dash or any other flat surface.

Fender Mirror



Mounted on either of the forward mudguards, the wide angle diminishing mirror gives the driver a larger range of vision than a mirror attached on the windshield.

		Each
No. 5559 Fender Mirror, 5½-in., nickel finish.....		\$1.45
Each.....D.P. \$2.11	Dozen.....D.P. \$23.33	
No. 55590 Fender Mirror, 5½-in., black finish.....		1.45
Each.....D.P. \$2.11	Dozen.....D.P. \$23.33	



TIRE CHAINS

Weed Anti-Skid Chains

Weed Anti-Skid Chains represent the highest development of an anti-skid device. They are made as carefully as the automobile on which they are used, and, as you probably have often heard said, "Every Weed is Guaranteed." The cross chains are made of special stock and the links are smoothly welded. They are hardened in our own furnaces under pyrometer readings and are then heavily brass plated. They are diamond hard, yet not brittle, combining great strength and wearing quality. The Weed side chain is made of heavy wire of high tensile strength and is heavily galvanized to prevent rusting.



Price List of Weed Anti-Skid Chains

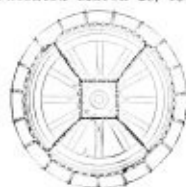
Size	Price	Size	Price
28x2 1/2	\$3.50	30x4 1/2	\$6.50
30x2 1/2	3.75	32x4 1/2	7.00
28x3	4.00	34x4 1/2	7.50
30x3	4.50	35x4 1/2	8.00
32x3	5.00	36x4 1/2	8.00
34x3	5.50	38x4 1/2	8.75
36x3	6.00	40x4 1/2	9.50
		42x4 1/2	11.00
28x3 1/2	4.50		12.50
30x3 1/2	5.00	34x5	8.50
32x3 1/2	5.50	35x5	9.00
34x3 1/2	6.00	36x5	9.00
36x3 1/2	6.50	38x5	9.75
38x4	5.50	39x5	10.50
32x4	6.00	40x5	11.25
33x4	6.50		12.00
34x4	7.00	36x5 1/2	12.00
35x4	7.50	37x5 1/2	13.00
36x4	7.50	38x5 1/2	14.00
37x4	8.00	38x6	14.00
40x4	10.00	40x6	15.00

Price List of Weed Cross Chains

Size	Each	Size	Each
2 1/2	\$0.05	4 1/2	\$0.10
3	.06	5	.12
3 1/2	.08	5 1/2	.15
4	.09	6	.18

Weed Chain Adjusters

Patented March 29, 1910



Weed Chain Adjusters are four springs, radiating from a center chain surrounding the hub; are attached by simple hooks to the side chain. The adjuster draws the chains evenly to the tires—holds them right, fairly taut, but not tight. Allows the chains to "creep," and that's the essential thing. When the chains "creep" there isn't a ghost of a chance to cause injury to the tires.

Price List of Weed Chain Adjusters

28-30, 32-34, 36, per pair	\$1.00
37-38, 40-42, per pair	1.50

Special Discounts Apply to This Page

Rid-O-Skid Tire Chains



Rid-O-Skid Tire Chains are offered as an anti-skid device to meet the requirements of those to whom initial cheapness is the chief consideration. They are necessarily of inferior quality—are not made as carefully or of diamond-hard material as are Weed Tire Chains. If you ignore the maxim "Initial Cheapness is False Economy" and purchase Rid-O-Skid Chains instead of Weed Chains, you will at least be much wiser than the motorist who insists upon taking chances by "depending on rubber alone," and later experience will show you that Weed chains give much greater mileage and are, therefore, cheaper in the end.

Price List of Rid-O-Skid Tire Chains

Size	Price	Size	Price
28x2 1/2	\$1.95	30x4 1/2	\$3.00
30x2 1/2	2.10	32x4 1/2	3.25
28x3	2.40	34x4 1/2	3.40
30x3	2.50	35x4 1/2	3.50
32x3	2.60	36x4 1/2	3.60
34x3	2.75	37x4 1/2	3.75
36x3	2.90	38x4 1/2	3.80
		40x4 1/2	4.25
28x3 1/2	2.50	42x4 1/2	4.50
30x3 1/2	2.65		
32x3 1/2	2.80	34x5	4.10
34x3 1/2	2.95	36x5	4.30
36x3 1/2	3.10	37x5	4.70
38x4	2.80	38x5	4.90
32x4	3.00	39x5	5.10
33x4	3.10	40x5	5.25
34x4	3.20	36x5 1/2	5.30
35x4	3.30	37x5 1/2	5.40
36x4	3.40	38x5 1/2	5.60
37x4	3.50	38x6	6.50
40x4	4.00	40x6	6.75

Weed Chains for Motorcycles



Patented March 24, 1903; Aug. 23, 1904

Weed Chains for Motorcycles are just as perfect in principle, construction and workmanship as Weed Anti-Skid Chains for automobiles. They are light in weight and easily carried. Packed one chain in a small canvas bag, which can be easily carried in a tool box or coat pocket when not in use, without inconvenience. They are easily attached.

Price List of Weed Chains for Motorcycles

Size	Each	Size	Each
26x2 1/2	\$2.50	29x2 1/2	\$2.75
28x2 1/2	2.50	28x3	3.00
28x2 1/2	2.75		

Weed Cross Chains for Motorcycles

Size	Each
2 1/2	\$0.06
2 1/2	.08
3	.10

Special Discounts Apply to This Page



TIRE CHAINS, MUD HOOKS, ETC.

Weed Chains for Solid Tires



Patented March 24, 1903; Aug. 23, 1904

An efficient traction and anti-skid device for single and dual solid truck tires.

They are made especially strong and so constructed that they satisfactorily meet the requirements of heavy truck service when the clearance between rim and drive chain is not less than 1½ inches on large sizes, or 1 inch on small sizes. When there is less than this clearance our Lyon Grips should be used.

Price List of Weed Chains

For Single Solid Tires

Size	Per Pr.	Size	Per Pr.
32x3	\$6.00	38x4	\$12.00
34x3	6.50	40x4	13.00
36x3	7.00	42x4	14.00
38x3	8.00	34x4½	10.50
40x3	8.50	36x4½	11.50
42x3	9.00	38x4½	12.50
30x3½	7.00	34x5	12.50
32x3½	7.50	36x5	13.50
34x3½	8.50	38x5	14.50
36x3½	9.50	40x5	15.50
38x3½	10.00	36x6	14.00
30x4	8.50	38x6	15.00
32x4	9.00	40x6	16.00
34x4	10.00	42x6	17.00
36x4	11.00		

For Dual Solid Tires

Size	Per Pr.	Size	Per Pr.
36x3	\$12.50	36x4½	\$16.50
38x3	13.50	38x4½	17.50
34x3½	14.00	40x4½	18.50
36x3½	15.00	34x5	16.00
38x3½	16.00	36x5	17.00
40x3½	17.00	38x5	18.00
34x4	15.00	40x5	19.00
36x4	16.00	42x5	20.00
38x4	17.00	40x6	21.00
40x4	18.00	42x6	22.00
42x4	19.00	40x7	23.00
34x4½	15.50	42x7	24.00

Cross Chains, Made of Special Stock

For Single Solid Tires

Size	Per 100	Size	Per 100
3-inch	\$9.00	4½-inch	\$21.00
3½-inch	15.00	5-inch	24.00
4-inch	19.00	6-inch	27.00

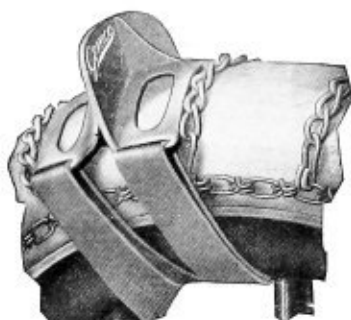
For Dual Solid Tires

Size	Per 100	Size	Per 100
3-inch	\$25.00	5-inch	\$35.00
3½-inch	28.00	6-inch	38.00
4-inch	30.00	7-inch	40.00
4½-inch	33.00		

Locks, each\$0.05

Special Discounts Apply to Weed Chains

Emergency Mud Hooks



One on each wheel, we guarantee, will get you out of the mud, sand or snow when everything else fails. They can be put on when the wheel is in deep mud, but chains can not; and they are sure to get you out, while chains will dig deeper. When you are out take them off. The farmer will charge the price of two sets to pull you out of one hole.

For long stretches of mud or deep sand two or three sets can be used to good advantage. Every tourist should carry a set. They are malleable iron; can not break; weight, 5 pounds per set.

No. 1 Emergency Mud Hooks for 3 and 3½ tires,
per pair.....\$2.00
Per pair....D.P. \$3.00

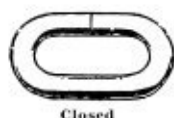
No. 2 Emergency Mud Hooks for 4 and 4½ tires,
per pair.....2.00
Per pair....D.P. \$3.00

No. 3 Emergency Mud Hooks for 5 and 5½ tires,
per pair.....2.00
Per pair....D.P. \$3.00

Quick Repair Link



Open



Closed

Quick Repair Link—Rapid, efficient, durable. Cuts show actual size.

100 in box, price.....\$1.00
Per box....D.P. \$0.88



JACKS

Reliable Jacks



No. 1

The Reliable Jacks are constructed entirely of malleable iron and steel; are strong, safe, compact and durable. The design is such that the lever does not interfere with the springs, truss-rods or body of the car. It can be operated under any car.

No. 00 Reliable Auto Jack, weight 4½ pounds, capacity 2 tons, adjustment 8½ to 14 inches, each.....\$2.00

Each.....D.P. \$2.22

Doz.....D.P. \$24.00

No. 1 Reliable Auto Jack, weight 5 pounds, capacity 2 tons, adjustment 10½ to 18 inches, each..... 2.00

Each.....D.P. \$2.22

Doz.....D.P. \$24.00

No. 2 Reliable Auto Jack, weight 8 pounds, capacity 3 tons, adjustment 12 to 20 inches, each..... 2.50

Each.....D.P. \$2.77

Doz.....D.P. \$29.10

This is one of the most attractive propositions in the way of a light weight, compact, durable low-priced jack that has yet been placed before the automobile buying public. No loose parts to get lost; self-locking, quickly adjusted, with a 1,500-pound capacity. The large side gear makes it very speedy in its operation. It is a very durable jack and takes up very little space in the tool box.

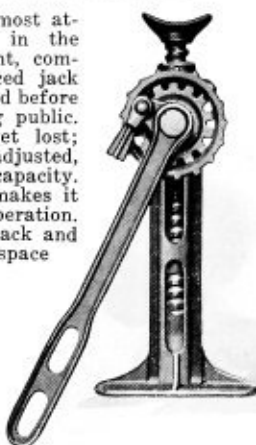
No. 31 Reliable Auto Jack, weight 4½ lbs., capacity 1,500 pounds, adjustment 8 to 12 inches, each.....\$0.80

Each.....D.P. \$1.33

Doz.....D.P. \$14.66

No. 32 Reliable Auto Jack, weight 5 lbs., capacity 1,500 lbs., adjustment 10 to 16 inches, each.....\$0.80

Each.....D.P. \$1.33 Doz.....D.P. \$14.66



No. 32

This is not the old type of ratchet jack, but an entirely new design. All the unnecessary working parts have been eliminated, making a jack of very simple construction and one that is exceptionally easy to operate. It is constructed entirely of malleable iron.

No. 41 Reliable Ratchet Auto Jack, weight 6 lbs., capacity 1 ton, adjustment 10 to 16½ inches, each.....\$1.00

Each.....D.P. \$1.44

Doz.....D.P. \$16.00



No. 41

Standard Jacks



Baby Standard

This is a thoroughly high-grade jack, made of selected malleable castings except the rack bar, which is solid steel with machine-cut teeth.

This jack can also be furnished with a height of 12½ inches down and 18 inches raised.

Baby Standard Jack, capacity 1,500 pounds, height closed 10½ inches to raise 5½ inches, weight 6½ pounds, each.....\$3.00

Each.....D.P. \$2.22

Doz.....D.P. \$24.00

This is a strictly high-grade and powerful jack, suitable for the heaviest and most expensive automobiles. Rack bar is steel with machine-cut teeth, insuring the smoothest and most reliable action combined with the utmost strength.

No. 1 Standard Jack, capacity 2,000 pounds, height closed 11½ inches to raise 6½ inches, weight 9½ pounds, each.....\$4.00

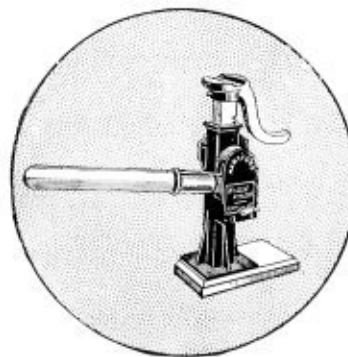
Each.....D.P. \$3.33

Doz.....D.P. \$37.33



No. 1 Standard

Hartford Auto Jack



The best Auto Jack, strong, efficient, reliable, easy working.

Here's the jack that actually does what every motorist wants a jack to do—lift the heaviest car in the shortest time with the least effort and the greatest ease.

Regular equipment with Oldsmobile, Autocar, Marmon, Pope-Hartford Six, etc.

Each.....\$6.50

Each.....D.P. \$10.80



JACKS

"Barrett Junior" Automobile Jack

The smallest "Barrett" Jack made with malleable iron base. It will handle the great number of cars weighing less than 3000 lbs. and meets the demand for a moderate-priced jack for such duty. It embodies the mechanical advantages, high class materials and skilled workmanship which are synonymous with the name "Barrett" to users of jacks everywhere.

No. 345 Barrett Junior Automobile Jack with Malleable Iron Base. Capacity 1500 pounds. Height closed 11 inches to raise 6½ inches. Weight 7 lbs., each \$2.50

Each..D.P. \$3.32 Doz..D.P. \$35.55



No. 345
1500 Pounds
Capacity

"Barrett" Standard Series Automobile Jacks

The base, socket lever and top are of malleable iron; the rack pawls and pins of special analysis high carbon steel, heat treated. The working parts are machined to an extent unknown in other jacks, insuring the utmost reliability and ease of operation. The load is raised one tooth space at each down stroke of lever, and lowered in the same convenient way after moving the small reversing lever. No screws are used in assembling, so that parts cannot come loose from the incessant vibration in an automobile tool box.

No. 07 Barrett Standard Automobile Jack, capacity one ton, height 8½, raise 4 inches, weight with lever 8½ lbs., each \$4.00

Each..D.P. \$4.66 Doz..D.P. \$50.66

No. 08 Barrett Jack, capacity one ton, height closed 11½ inches to raise 6½ inches, weight 9½ lbs., each \$4.00

Each..D.P. \$4.66 Doz..D.P. \$50.66



No. 08
One Ton Capacity

"Barrett" Geared Motor Truck Jacks

Unequaled for handling motor trucks, heavy motor cars, or for general garage service.

Ease and convenience of operation have been developed to the highest degree in these jacks. The leverage is so compounded by gears that the load is lifted with only one-third the effort required with direct leverage.

No. 100 Barrett Geared Motor Truck Jack. Three ton capacity. Height 10½ inches, to raise 5½ inches, weight 16 lbs., each \$8.00

Each..D.P. \$12.22 Doz..D.P. \$133.20

No. 200 Barrett Geared Motor Jack. Capacity five tons. Height 13 inches, to raise 6½ inches, weight with lever 28 lbs., each \$11.00

Each..D.P. \$16.65 Doz..D.P. \$186.48



No. 100
3 Tons Capacity

"Baby Barrett" Pressed Steel Automobile Jack

Designed to handle, with a wide margin of safety, the vast number of pleasure cars weighing less than 2500 lbs. Each and every jack is thoroughly tested under full load before shipment. Not a single screw is used in the assembling of this jack, so that parts cannot come loose from the incessant jarring in an automobile tool box. The load is raised one tooth space at each down stroke of handle and lowered in the same way after pushing down the small reversing lever.

No. 145 Baby Barrett Pressed Steel Jack, capacity up to 2500 pounds. Height closed 11½ inches to raise 5½ inches, weight 6 pounds, each \$1.90

Each..D.P. \$2.44 Doz..D.P. \$26.66



No. 145
For Light Cars

"Barrett" Pressed Steel Automobile Jack

Built to meet the demands for a thoroughly reliable and convenient jack, of the standard "Barrett" quality, yet obtainable at the lowest possible price. To that end the frame and base are made of pressed steel, a material which affords unusual strength with light weight and low manufacturing cost.

No. 108 Barrett Pressed Steel Jack, capacity one ton. Height closed 11½ inches to raise 5½ inches, weight 8½ pounds, each \$3.35

Each..D.P. \$4.22 Doz..D.P. \$46.66



No. 108
One Ton Capacity

"Barrett" Pressed Steel Automobile Jack

The same as No. 108, in addition having foot lift which can readily be affixed to any distance from top lift to suit the difference in height between front and rear axles of various cars.

No. 106 Barrett Pressed Steel Jack. Capacity one ton with foot lift range of adjustment. Lowest 5 inches; highest 9 inches. Top lift height 10½ inches to raise 5½ inches, each \$4.30

Each..D.P. \$5.55

Dozen..D.P. \$62.22



No. 106
One Ton Capacity



TIRE SAVERS

Reliable Tire Saver



No. 51

The Reliable Tire Saver and Garage Jack is quickly adjusted to any height of axle or hub without removing bolts or cotters. Has a raise of 2½ inches. It has a swivel top and leather-faced saddle. Is constructed entirely of malleable iron.

The lighter tire savers are used for cars weighing up to 3,000 pounds. The extra heavy are for cars weighing 3,000 pounds or over.

No. 51 Reliable Tire Saver Jack, weight per set 32 lbs., capacity 1,500 lbs., adjustment 11½ to 19½ inches, per set of four.....\$6.70

Per set of four....D.P. \$7.77

No. 52 Reliable Tire Saver Jack, weight per set 40 lbs., capacity 1,800 lbs., adjustment 11½ to 21 inches, per set of four.....8.00

Per set of four....D.P. \$10.00

The latest and best low priced tire saver on the market. Constructed on mechanical lines from first-class material by experienced workmen. Designed for use with light and medium weight cars.

No. 53 Reliable Special Tire Saver Jack, weight per set 24 lbs., capacity 1,000 lbs., adjustment 9½ to 17½ inches, per set of four.....\$5.00

Per set of four....D.P. \$6.33



No. 53



No. 60

The Reliable No. 60 Tire Saver Jack is designed and works on the principle of the ratchet jack. It is the latest and most practical garage jack and tire saver ever put on the market. It will raise or lower a car notch by notch as desired within range of the jack without adjustment. It is constructed entirely of malleable iron and is backed up by the same guarantee that goes with the rest of these goods.

No. 60 Reliable Tire Saver and Garage Jack, weight 10 lbs., capacity 1,800 lbs., adjustment 11½ to 21 inches, per set of four.....\$8.00

Per set of four....D.P. \$10.00

The Storage Stand



No. 54

This stand contains two pieces only; very simple in its construction, yet strong enough to support the weight of any car. It is constructed of the best malleable iron, nicely finished, and will be worth many times its cost to the automobile owner.

No. 54 Storage Stand, weight 3 lbs., per set of four.....\$3.00

Per set of four....D.P. \$3.66

Norwood Vehicle Caster

Don't lift or drag your cars around; use a Norwood Caster.

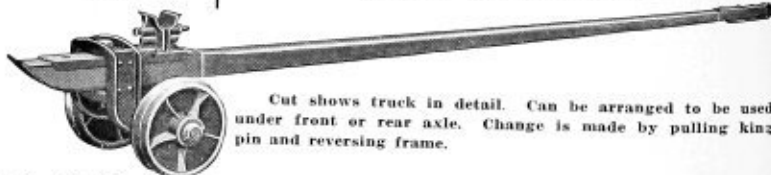
Cars can be run on or off either end. Fits and protects the tires when car is not in use; indispensable for handling cars in the garage, factory, private barns, etc.

No. 2 Norwood Caster, size 13x24 inches, for cars of any weight, each.....\$7.50

Each....D.P. \$13.32



Holmes Wrecking Truck



Cut shows truck in detail. Can be arranged to be used under front or rear axle. Change is made by pulling king pin and reversing frame.

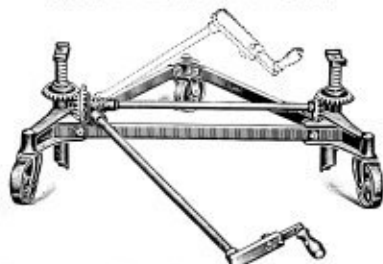
Frame and wheels are made of malleable steel castings, rigid, well braced and practically unbreakable. The wheels revolve on Hyatt roller bearings and are of ample size to pull easily on rough roads. The tongue is made of best second growth ash, heavily ironed so that it can be used as a pry (the wheels and frame in position make an ideal fulcrum in such a case). The axle-rest is also made of steel castings and is adjustable to any shape or size axle, front or rear. Total weight is 158 pounds.

Each, f. o. b. Danville, Illinois.....\$30.00
Each....D.P. \$53.33



JACKS AND AMBULANCES

Weaver Auto Twin-Jack



The Weaver Auto Twin-Jack meets every requirement. As a lifting jack it is preferable to the ordinary type of jack as the 34-inch wheel base offers an absolutely safe and dependable support for dismantled cars. Brakes can be safely and quickly tested with the rear axle supported upon one of these jacks. The long extension handle is also a great convenience.

Economizes floor space. Cars can be moved sideways, "cut in" at right angles, or turned completely around within their own length, thus effecting a great saving in floor space in the shop or garage. Also a great convenience in unloading autos from freight cars.

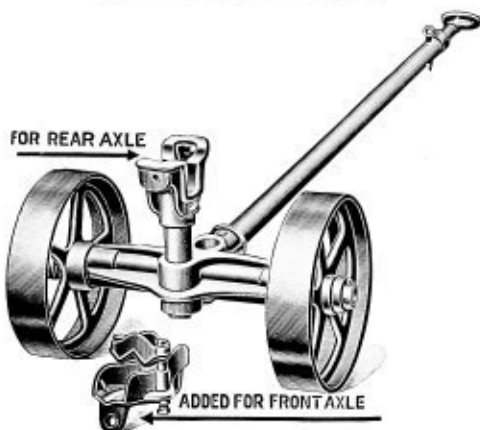
No treacherous ratchets. The screw hoisting principle is a great factor for safety as there are no treacherous ratchets to jar loose or become dislodged and allow the car to fall.

Ball and Roller-Bearing Throughout. The gear nuts which raise the screws each revolve upon ball-bearings. The caster yokes also turn upon ball-bearings and the wheels are equipped with rollers. Lifting leverage 400 to 1; 34-inch wheel base; length of handle 26 inches; 1 1/16-inch screws; diameter of wheels 4 1/4 inches; width of tire 2 inches. Lifting capacity, 4,000 lbs. each. Shipping weight, 50 lbs. each.

Weaver Auto Twin-Jack, each.....\$12.00
Each....D.P. \$20.00

Weaver Auto Twin-Jack, per pair..... 20.00
Per pair....D.P. \$33.32

Weaver Auto Ambulance



The Weaver Auto Ambulance is a thoroughly practical and universal device for pulling disabled cars into the repair shop. Readily attached to either axle of the car; easily handled by one man; quickly adjusted to meet every contingency; comparatively light, but amply strong; telescoping tongue.

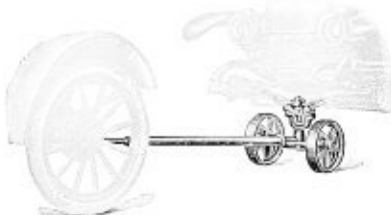
Every provision has been made for readily adjusting the ambulance to either the front or rear axle of any car, as shown in the cut below. The height of the standard may be varied as conditions demand by heavy pin or key and the length of the tongue may be varied at will from six to eleven feet.

Cars can't bounce or slip. Ample provision is made for securing the axle of the car firmly to the ambulance so as to prevent any play at the connection. This is vitally important.

The wheels are of cast steel and very strongly designed. They are 14 inches in diameter with 3-inch face. Can be used on country roads with entire satisfaction. Broad roller bearings permit heaviest loads to be towed with little energy.

The construction throughout is extremely strong, but so designed as to eliminate all unnecessary weight. The telescoping tongue is of double strength steel tubing; 1 1/4-inch steel axle extends entirely through the frame; malleable iron saddles; 20-inch tread; shipping weight complete 130 pounds.

Weaver Auto Ambulance, each.....\$30.00
Each....D.P. \$53.32



Weaver Extra Heavy Auto Twin-Jack



Weight, each, 110 pounds. 7-inch Wheels.

Since the regular type of Auto Twin-Jack was put on the market there have been numerous calls for a heavier Auto Twin-Jack for service under light trucks or extremely heavy pleasure cars where the conditions to be contended with are particularly difficult. So the extra heavy Auto Twin-Jack was designed. It is identical with the regular jack in general principle, but has twice its strength and capacity.

Comparative Dimensions

	Regular Auto Twin-Jack	Extra Heavy Auto Twin-Jack
Weight (each).....	50 lbs.	110 lbs.
Lifting capacity.....	4,000 lbs.	8,000 lbs.
Diameter of wheels.....	4 1/4 inches	7 inches
Length of handle.....	26 inches	34 inches
Diameter of screw.....	1 1/16 inch	1 1/2 inch
Range of lift.....	9 inches	9 1/2 inches

The caster yokes on the jack are very strongly designed and made of the best cast steel. The large gear nuts which raise the screws each revolve upon twenty 5/16-inch steel balls which operate between two very heavy hard steel thrust bearings. Each wheel yoke revolves upon two sets of steel balls. The 7-inch wheels enable enormous burdens to be transported over comparatively rough floors with almost incredible ease. Large roller bearings in the hubs assist in reducing the resistance to the minimum.

Weaver Auto Twin-Jacks, extra heavy, each.....\$20.00
Each....D.P. \$33.32

Weaver Auto Twin-Jacks, extra heavy, per pair.... 36.00
Per pair....D.P. \$60.00



THE GIBSON COMPANY

INDIANAPOLIS



VULCAN SPRINGS



We carry in stock Vulcan Springs that fit the following cars:

BUICK

Model	Location	Price	Stock No.
10-26-27-32-33-34-35-36	Front	\$4.50	1100
10-26-27-32-33-34-35-36	Lower half, rear	4.50	1101
10-26-27-32-33-34-35-36	Upper half, rear	4.50	1102
16-17	Front	6.75	1103
16-17, using Type D only	Rear	16.00	1104
19-21	Front	6.00	1105
19, using Type B only	Lower half, rear	6.75	1106
19, using Type B only	Upper half, rear	7.25	1107
28-29-30-31	Front	6.25	1108
28-30	Lower half, rear	6.75	1109
28-30	Upper quar., rear	3.00	1110
29-31	Lower half, rear	7.00	1111
29-31	Upper quar., rear	3.00	1112
38-39-43	Front	6.75	1113
38	Lower half, rear	8.25	1114
39-43	Lower half, rear	10.00	1115
39-43	Upper quar., rear	5.00	1116
24-25—1913	Front	4.50	1117
24—1913	Lower half, rear	6.75	1118
24—1913	Upper quar., rear	3.00	1119
25—1913	Lower half, rear	6.75	1120
25—1913	Upper quar., rear	3.00	1121
40—1913	Front	6.00	1122
40—1913	Lower half, rear	7.50	1123
40—1913	Upper quar., rear	4.00	1124
B-24-25—1914	Front	5.50	1125
B-24—1914	Lower half, rear	7.00	1126
B-24—1914	Upper quar., rear	3.75	1127
B-25—1914	Lower half, rear	7.50	1128
B-25—1914	Upper quar., rear	4.00	1129
B-36-37-38—1914	Front	7.50	1130
B-36-38—1914	Lower half, rear	9.00	1131
B-36-38—1914	Upper quar., rear	4.50	1132
B-37—1914	Lower half, rear	9.50	1133
B-37—1914	Upper quar., rear	5.00	1134
B-55—1914	Front	8.50	1135
B-55—1914	Lower half, rear	16.00	1136
B-55—1914	Upper quar., rear	7.00	1137

CARTER CAR

Model H	Front	\$5.50	1300
Model H	Rear	6.75	1301
Model R	Front	8.00	1302
Model R	Lower half, rear	9.75	1303
Model R	Upper quar., rear	8.50	1304
Model S	Front	7.75	1305
Model S	Lower half, rear	9.50	1306
Model S	Upper quar., rear	8.00	1307
Model L	Front	5.50	1308
Model L	Rear	6.75	1309
Model 7	Front	7.00	1310
Model 7	Lower half, rear	8.50	1311
Model 7	Upper quar., rear	5.50	1312

CADILLAC

30—up to 1911	Front	\$6.75	1200
30—up to 1911	Rear Side	8.00	1201
30—up to 1911	Rear Cross	8.00	1202
30—1911	Front	8.00	1203
30—1911	Rear Side	10.00	1204
30—1911	Rear Cross	9.00	1205
30—1912	Front	8.00	1206
30—1912	Rear Side	10.00	1207
30—1912	Rear Cross	9.00	1208
1913	Front	8.00	1209
1913	Rear Side	10.00	1210
1913	Rear Cross	9.00	1211
1914	Front	8.00	1212

CADILLAC—Continued

Model	Location	Price	Stock No.
1914	Rear Side	12.00	1213
1914	Rear Cross	9.00	1214

(Specify number of leaves wanted on spring.)

CHALMERS

Thirty-F-1909	Front	\$6.50	1400
Thirty-F-1909	Lower half, rear	6.50	1401
Thirty-K-1910 M-1911	Front	7.50	1402
Thirty-K-1910 M-1911	Lower half, rear	8.50	1403
Thirty-K-1910 M-1911	Upper quar., rear	5.50	1404
40	Front	8.00	1405
40	Lower half, rear	10.00	1406
Thirty-Six Model 10-1912	Front	7.50	1407
Thirty-Six Model 10-1912	Lower half, rear	8.50	1408
Thirty-Six Model 10-1912	Upper quar., rear	5.50	1409
17—1913	Front	7.50	1410
17—1913	Lower half, rear	10.00	1411
17—1913	Upper quar., rear	5.50	1412
18—1913—6 cylinder	Front	8.50	1413
18—1913—6 cylinder	Lower half, rear	12.50	1414
18—1913—6 cylinder	Upper quar., rear	6.00	1415
24—1914	Front	8.50	1416
24—1914	Lower half, rear	12.75	1417
24—1914	Upper quar., rear	6.50	1418
26—1915	Front	8.50	1419
26—1915	Lower half, rear	14.00	1420
26—1915	Upper quar., rear	6.50	1421

CHEVROLET

H-2 and H-4—1914	Front	\$5.00	1500
H-2—1914	Lower half, rear	6.25	1501
H-2—1914	Upper quar., rear	3.25	1502
H-4—1914	Lower half, rear	7.50	1503
H-4—1914	Upper quar., rear	4.00	1504

DETROITER

Up to 1915	Front	\$5.00	1600
Up to 1915	Rear Side	5.00	1601
Up to 1915	Rear Cross	5.25	1602

E. M. F.

30—1909-10-11	Front	\$6.00	1700
30—1909-10-11	Lower half, rear	6.00	1701
30—1909-10-11	Upper half, rear	6.50	1702
30—1912	Front	5.50	1703
30—1912	Lower half, rear	6.75	1704
30—1912	Upper half, rear	7.00	1705

EVERITT

30—1911	Front	\$6.25	1800
30—1911	Lower half, rear	5.25	1801
30—1911	Upper half, rear	6.25	1802
6-48	Front	7.25	1803
6-48	Lower half, rear	7.25	1804
6-48	Upper half, rear	7.25	1805

FEDERAL TRUCKS

G. & H.	Front	\$8.75	1850
G. & H.	Rear	17.50	1851

FLANDERS

20—1910-11	Front	\$5.00	1900
20—1910-11	Lower half, rear	5.25	1901
20—1910-11	Upper half, rear	6.00	1902
20—1912	Lower half, rear	6.00	1903
20—1912	Upper half, rear	6.00	1904



THE GIBSON COMPANY

INDIANAPOLIS



175

VULCAN SPRINGS—Continued

FORD

Model	Location	Price	Stock No.
T	Front	\$4.00	2000
T—Standard Tread	Rear	12.00	2001
T—Southern Tread	Rear	13.00	2002
N-R-S	Front	4.00	2000
N-R-S	Rear	4.00	2003

HUDSON

20—1910-11	Front	\$5.00	2100
20—1910-11	Lower half, rear	7.00	2101
20—1910-11	Upper quar., rear	4.00	2102
33—1911	Front, 1½ in width	6.00	2103
33—1911	Lower half, rear	10.00	2104
33—1911	Upper quar., rear	4.00	2105
33—1912	Front	7.50	2106
33—1912	Lower half, rear	10.00	2107
33—1912	Upper quar., rear	4.25	2108
(Used on Touring, Roadster, Speedster and Coupe.)			
37—1913	Front	7.50	2106
37—1913	Lower half, rear	10.00	2109
37—1913	Upper quar., rear	5.75	2110
(Used on Touring, Torpedo and Coupe.)			
54—1913	Front	8.00	2111
54—1913	Lower half, rear	12.50	2112
(Used on Touring Car and Torpedo.)			
54—1913	Lower half, rear	15.00	2113
(Used on Touring Car and Torpedo.)			
54—1913	Upper quar., rear	5.00	2114
(Used on Touring, Torpedo and Commercial Roads)			
54—1913	Upper quar., rear	8.00	2115
(Used on Touring Car and Torpedo.)			
6-40—1914	Front	8.00	2116
6-40—1914	Lower half, rear	12.50	2117
6-40—1914	Upper quar., rear	4.25	2118
6-54—1914	Front	9.00	2119
6-54—1914	Lower half, rear	15.00	2120
6-54—1914	Upper quar., rear	5.00	2121
6-40—1915	Front	9.00	2122
6-40—1915	Lower half, rear	13.00	2123
(Used on Touring Car.)			
6-40—1915	Upper quar., rear	5.00	2124

HUPMOBILE

20—All Models	Front	\$4.00	2200
20—Roadster, Std. Trd.	Rear	6.00	2201
20—Touring, Std. Trd.	Rear	6.00	2202
20—Roadster, Sou. Trd.	Rear	6.50	2203
20—Touring, Sou. Trd.	Rear	6.50	2204
20	Auxiliary Top Leaf	1.50	2205
32—1912	Front	5.00	2206
32—1913-14	Front	5.00	2207
32—1912-13-14, Std. Trd.	Rear	10.00	2208
32—1912-13-14, Sou. Trd.	Rear	11.50	2209
32—All Models	Auxiliary Top Leaf	2.00	2210

MAXWELL

L, LA, RL, RS and LC	Front	\$4.50	2300
L, LA, RL, RS and LC	Rear	5.00	2301
LD	Front	5.50	2302
LD	Rear	5.50	2303
A	Front	5.00	2304
A	Rear	6.00	2305
AA, AB and AC	Front	5.75	2306
AA, AB and AC	Rear	6.00	2307
Q and Twenty-Two	Front	5.50	2308
Q and Twenty-Two	Lower half, rear	5.75	2309
Q and Twenty-Two	Upper quar., rear	2.50	2310
I	Front	5.50	2311
I	Lower half, rear	5.25	2312

MAXWELL—Continued

Model	Location	Price	Stock No.
I	Upper quar., rear	2.50	2313
Mascotte & Thirty (Tou'g)	Front	\$4.75	2314
Mascotte & Thirty (Tou'g)	Lower half, rear	6.25	2315
Mascotte & Thirty (Tou'g)	Upper quar., rear	3.50	2316
H, HA, HB, HC, and HD	Front	5.50	2317
H, HA, HB, HC, and HD	Rear	6.00	2318
D, DA, K and KA	Front	5.50	2319
D, DA, K and KA	Rear	6.50	2320
E, EA, G, GA, GAR and Mercury	Front	6.00	2321
E, EA, G, GA, GAR and Mercury	Lower half, rear	9.00	2322
E, EA, G, GA, GAR and Mercury	Upper quar., rear	3.50	2323
Special and Forty	Front	5.50	2324
Special and Forty	Lower half, rear	10.00	2325
Special and Forty	Upper quar., rear	3.50	2326
25—1914	Front	4.00	2327
25—1914	Rear	5.50	2328
35—1914	Front	6.50	2329
35—1914	Lower half, rear	8.50	2330
35—1914	Upper quar., rear	2.50	2331
50—1914	Front	6.50	2332
50—1914	Lower half, rear	13.25	2333
50—1914	Upper quar., rear	5.25	2334
25—1915	Front	4.50	2335
25—1915	Lower half, rear	6.50	2336
25—1915	Upper quar., rear	3.00	2337

OAKLAND

30—1910-1911	Front	\$4.50	2400
30—1910-1911	Lower half, rear	5.25	2401
30—1910-1911	Upper half, rear	5.25	2402
40—1910-1911	Front	6.00	2403
40—1910-1911	Rear	18.00	2404
30—1912-1913	Front	6.50	2405
35—1913	Front	6.00	2406
35—1913	Lower half, rear	8.50	2407
35—1913	Upper quar., rear	5.50	2408
36—1914	Front	6.00	2406
36—1914	Lower half, rear	8.50	2407
36—1914	Upper quar., rear	5.50	2408
43—1914	Front	9.00	2409
43—1914	Lower half, rear	12.50	2410
43—1914	Upper quar., rear	7.00	2411
48—1914	Front	9.50	2412
48—1914	Lower half, rear	12.50	2413
48—1914	Upper quar., rear	7.00	2414
6-60—1914	Front	10.00	2415
6-60—1914	Lower half, rear	15.00	2416
6-60—1914	Upper quar., rear	10.00	2417

OVERLAND

38-47	Front	\$5.25	2501
38-47	Lower half, rear	5.00	2502
38-47	Upper half, rear	5.00	2503
40-41-42-55-56	Front	6.50	2504
40-41-42-55-56	Lower half, rear	8.00	2505
40-41-42-55-56	Upper quar., rear	4.00	2506
51	Front	6.50	2507
51	Lower half, rear	7.25	2508
51	Upper quar., rear	3.75	2509
52-53-54	Front	8.50	2510
52-53-54	Lower half, rear	7.50	2511
52-53-54	Upper quar., rear	3.75	2512
59-69	Front	5.00	2513
59-69	Lower half, rear	7.25	2514
59-69	Upper quar., rear	3.75	2515
60	Front	6.25	2516
60	Lower half, rear	2.25	2517
60	Upper quar., rear	3.50	2518

SPECIAL DISCOUNT APPLIES TO PRICES ON THIS PAGE



THE GIBSON COMPANY

INDIANAPOLIS



VULCAN SPRINGS, CLIP YOKES, ETC.

OVERLAND—Continued

Model	Location	Price	Stock No.
61-71	Front	\$7.00	2519
61-71	Lower half, rear	8.00	2520
61-71	Upper quar., rear	4.00	2521
79	Front	5.50	2522
79	Lower half, rear	7.50	2523
79	Upper quar., rear	3.75	2524
80-1915	Front	6.00	2525
80-1915	Lower half, rear	8.75	2526
80-1915	Upper quar., rear	5.00	2527
81-1915	Front	5.75	2528
81-1915	Lower half, rear	7.00	2529
81-1915	Upper quar., rear	3.00	2530
82-1915	Front	7.50	2531
82-1915	Lower half, rear	12.00	2532
82-1915	Upper quar., rear	6.00	2533

R. C. H.

Roadster or Touring	Front	\$4.00	2600
---------------------	-------	--------	------

REGAL

All 1909-10 Models	Front	\$6.50	2700
All 1909-10 Models	Lower half, rear	5.50	2701
Y-1911	Front	7.25	2702
Y-1911	Lower half, rear	5.50	2703
LF-SO-1912	Front	7.25	2704
LF-SO-1912	Lower half, rear	5.50	2705
H, Underslung-1913	Front	6.50	2706
H, Underslung-1913	Rear	8.00	2707
T-N, Underslung-1913	Front	6.50	2708
T-N, Underslung-1913	Rear	8.00	2709
C-1914	Front	8.00	2710
C-1914	Lower half, rear	10.00	2711

REO

Single Cylinder	Front	\$3.00	2800
Single Cylinder	Rear, complete	6.00	2801
Two-Cylinder	Front	6.00	2802
Two-Cylinder	Rear, complete	10.25	2803
R	Front	6.00	2804
R	Lower half, rear	7.00	2805
R	Upper quar., rear	4.50	2806
Fifth-1912	Front	7.25	2807
Fifth-1912-1914	Front	7.25	2808
Fifth-1912-13-14	Lower half, rear	8.00	2809
Fifth-1912-13-14	Upper quar., rear	5.00	2810

STUDEBAKER

25-1913	Front	\$5.00	2900
25-1913	Lower half, rear	5.00	2901
25-1913	Upper half, rear	5.50	2902
35-1913	Front	6.00	2903
35-1913	Lower half, rear	10.00	2904
35-1913	Upper quar., rear	5.00	2905
4-B-1914	Front	6.00	2906
4-B-1914	Lower half, rear	6.50	2907
4-B-1914	Upper half, rear	6.50	2908
6-B-1914	Front	6.25	2909
6-B-1914	Lower half, rear	10.00	2910
6-B-1914	Upper quar., rear	5.00	2911
4-1915	Front	6.00	2912
4-1915	Lower half, rear	6.50	2913
4-1915	Upper half, rear	6.50	2914
6-1915	Front	6.25	2915
6-1915	Lower half, rear	10.00	2916
6-1915	Upper quar., rear	5.00	2917

WHITE

GAB-GAD-GAF-GAG	Front	\$7.50	3000
GAB-GAD-GAF-GAG	Lower half, rear	8.50	3001
GAB-GAD-GAF-GAG	Upper quar., rear	4.25	3002

Special Discount Applies to Prices in this Column

No. 38 Heavy Clip Yokes



Made Cold From Bar Stock

These Yokes are drilled and reamed, making a perfect fit for the bolt.

No.	Distance Between Holes	Sizes of Holes	Per Doz.
38-B	1½ in.	7/16 in.	D.P. \$1.32
38-C	1¾ in.	7/16 in.	D.P. 1.44
38-D	2 in.	7/16 in.	D.P. 1.60
38-F	2 in.	¾ in.	D.P. 2.00
38-G	2¼ in.	¾ in.	D.P. 2.10
38-H	2½ in.	¾ in.	D.P. 2.22

No. 300 Spring Links



Handy for repairs. Forged from Special Grade O. H. Steel.

No.	Center to Center	Width of Bosses	Thickness of Bosses	Per Doz.
300-A	1½ in.	1½ in.	7/16 in.	D.P. \$1.22
300-C	2 in.	1½ in.	7/16 in.	D.P. 1.32
300-D	2¼ in.	1½ in.	7/16 in.	D.P. 2.22
300-E	2½ in.	1½ in.	7/16 in.	D.P. 2.66

Spring Shackle Bolts



Spring Shackle Bolt. This bolt is being made to meet the demand for a low price repair bolt, and used largely in connection with shock absorbers. It is made from open hearth steel, fitted with grease cup and spring, castle nut, cotter pin; case hardened finish. Carried in stock in the following sizes:

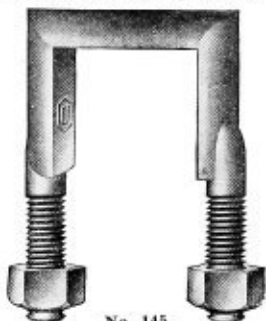
½ x 2¾ inches	9/16 x 3¼ inches
½ x 3 "	9/16 x 3¾ "
½ x 3½ "	9/16 x 4 "
½ x 3¾ "	9/16 x 4¼ "
½ x 4 "	¾ x 3¾ "
½ x 4¼ "	¾ x 4 "
7/16 x 3½ "	¾ x 4¼ "
7/16 x 3¾ "	

Shackle Bolts in any of the above sizes, each.....\$0.60
Each.....D.P. \$0.55



SPRING CLIPS AND SPREADERS

Heavy Half-Oval Spring Clips



No. 145.

FOR 1½-INCH SPRINGS

Size No.	Flat	Stem	Over All	Per doz.
150A	1	¾	3	D.P. \$3.25
150C	1	7/16	3	D.P. \$3.65
150D	1 3/16	7/16	3½	D.P. \$3.70
150E	1 7/16	7/16	3	D.P. \$3.75

FOR 1¾-INCH SPRINGS

Size No.	Flat	Stem	Over All	Per doz.
175B	1	7/16	3½	D.P. \$4.00
175C	1 3/16	7/16	3	D.P. \$4.00
175F	1½	7/16	3¾	D.P. \$4.00
175P	1½	7/16	3¾	D.P. \$4.10
175H	2	7/16	3½	D.P. \$4.10
175J	2½	7/16	4	D.P. \$4.15

FOR 2-INCH SPRINGS

Size No.	Flat	Stem	Over All	Per doz.
200B	1 3/16	7/16	3¾	D.P. \$4.15
200E	1½	7/16	3¾	D.P. \$4.15
200G	1½	7/16	3¾	D.P. \$4.45
200H	1 15/16	7/16	4¾	D.P. \$4.55
200HH	2¼	7/16	4¾	D.P. \$4.65
200L	1½	¾	3¾	D.P. \$5.00
200N	1½	¾	3¾	D.P. \$5.00
200P	2¾	¾	4¾	D.P. \$5.30
200V	1½	9/16	4	D.P. \$6.66
200KK	2	9/16	4¾	D.P. \$7.20
200ZZ	2¼	9/16	4¾	D.P. \$8.30
200AA	2	¾	4¾	D.P. \$8.30

FOR 2¼-INCH SPRINGS

Size No.	Flat	Stem	Over All	Per doz.
225C	1½	¾	4	D.P. \$5.30
225B	2	¾	4	D.P. \$5.30
225D	1¾	9/16	4	D.P. \$6.75
225P	2½	¾	4¾	D.P. \$10.00

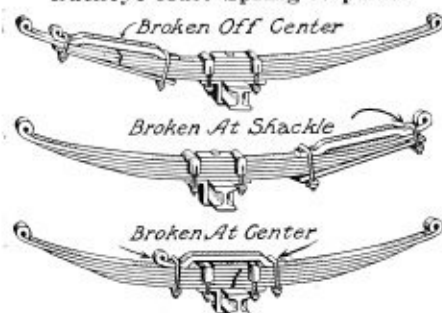
FOR 2½-INCH SPRINGS

Size No.	Flat	Stem	Over All	Per doz.
250D	2	¾	4½	D.P. \$6.75
250C	2½	¾	6½	D.P. \$7.20
250M	1¾	9/16	4¾	D.P. \$7.75
250E	2¾	¾	4¾	D.P. \$9.10

SPECIAL

Ford Front	For Model T Ford	D.P. \$8.00
Ford Rear	For Model T Ford	D.P. \$8.00

Buckeye Auto Spring Repairer



The Buckeye Spring Repairer will take care of any size spring broken either at center, off center or at the shackle. The bodies are made of high grade malleable iron, the "U" bolts of wrought iron and the under clips of malleable.

An under wood support is also furnished which prevents slipping when the repairer is used for spring broken off center or at shackle. This outfit comes black enameled and is packed in a strong telescoped box.

Each.....\$2.50
Each...D.P. \$3.88

1915 Spring Clip Package

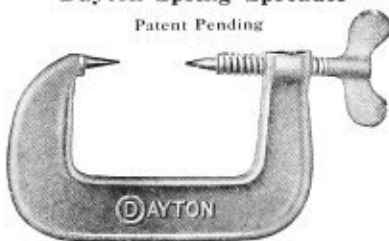


No. FU60 Assortment of 60 No. 145 Spring Clips, 14 sizes, put up in a substantial wooden box with hinged cover especially for repair shop.
Per Box.....D.P. \$28.88
Assortment as follows:

Quan.	Size No.	Spring	Flat	Stem	Over all under head
10	Ford Front				
10	Ford Rear				
4	150 D	1½	1 7/16	7/16	2½
4	175 C	1½	1 7/16	7/16	3
4	175 F	1½	1½	7/16	3½
4	175 H	1½	2	7/16	3½
4	200 B	2	1 7/16	7/16	3½
4	200 G	2	1½	7/16	3½
4	200 L	2	1½	7/16	3½
4	200 BB	2	1 15/16	7/16	4½
2	225 B	2½	2	7/16	4
2	225 D	2½	1½	7/16	4
2	250 D	2½	2	7/16	4½
2	250 M	2½	1½	7/16	4½

Dayton Spring Spreader

Patent Pending

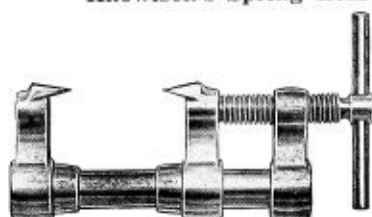


One of the most useful tools for the garage or owner. Quickly spreads the leaves of a spring far enough apart to be thoroughly oiled; not necessary to loosen clip or jack up frame.

Eliminates the necessity of taking springs apart for lubrication.

Each, japanned.....\$0.50
Each...D.P. \$0.48

Knowlson's Spring Leaf Spreader



Made of the highest grade drop forging, nickel plated, polished and well finished; adjustable to any size auto spring; separates the leaves just enough to insert the lubricant; does away

with the jacking up of the car; used as a clamp for broken springs.

Each.....\$1.75
Each...D.P. \$2.44



HORN AND CUT-OUT VALVES

Husk Valve



These valves are easily and quickly installed, take up but very little space and require absolutely no attention after installation.

No. 100	Husk Horn Valve, Smooth Bore, 1-in.	D.P. \$1.20
No. 101	Husk Horn Valve, Std. Iron Pipe, thread 1-in.	D.P. 1.30
(No. 101 opening measures 1 1/4-in., fits 1-in. iron pipe.)		
No. 102	Husk Horn Valve, Smooth Bore, 1 1/4-in.	D.P. 1.30
No. 103	Husk Horn Valve, Smooth Bore, 1 3/4-in.	D.P. 1.30
No. 104	Husk Horn Valve, Std. Iron Pipe, thread 1 1/4-in.	D.P. 1.32
(No. 104 opening measures 1 1/2-in., fits 1 1/4-in. iron pipe.)		
No. 105	Husk Horn Valve, Smooth Bore, 1 3/4-in.	D.P. 1.32
No. 106	Husk Horn Valve, Smooth Bore, 1 5/8-in.	D.P. 1.32
No. 107	Husk Horn Valve, Std. Iron Pipe, thread 1 5/8-in.	D.P. 1.55
(No. 107 opening measures 1 3/4-in., fits 1 5/8-in. iron pipe.)		
No. 108	Husk Horn Valve, Smooth Bore, 1 3/4-in.	D.P. 1.55
No. 109	Husk Horn Valve, Smooth Bore, 1 7/8-in.	D.P. 1.55
No. 110	Husk Horn Valve, Smooth Bore, 2-in.	D.P. 1.66
No. 111	Husk Horn Valve, Smooth Bore, 2 1/4-in.	D.P. 1.66
No. 112	Husk Horn Valve, Std. Iron Pipe, thread 2-in.	D.P. 1.66
(No. 112 opening measures 2 1/4-in., fits 2-in. iron pipe.)		
No. 113	Husk Horn Valve, Smooth Bore, 2 1/4-in.	D.P. 1.66
No. 114	Husk Horn Valve, Smooth Bore, 2 3/4-in.	D.P. 1.77
No. 115	Husk Horn Valve, Smooth Bore, 2 3/4-in.	D.P. 1.77
No. 116	Husk Horn Valve, Smooth Bore, 2 5/8-in.	D.P. 2.10
No. 117	Husk Horn Valve, Std. Iron Pipe, thread 2 5/8-in.	D.P. 2.10
(No. 117 opening measures 2 3/4-in., fits 2 5/8-in. iron pipe.)		
No. 118	Husk Horn Valve, Smooth Bore, 2 3/4-in.	D.P. 2.10
No. 119	Husk Horn Valve, Smooth Bore, 2 7/8-in.	D.P. 2.22
No. 120	Husk Horn Valve, Smooth Bore, 3-in.	D.P. 2.22

Bolt-on Horn Valve



No. 78	Bolt-on Type Horn Valve, 1-inch	D.P. \$1.20
No. 79	Bolt-on Type Horn Valve, 1 1/4-inch	D.P. 1.20
No. 80	Bolt-on Type Horn Valve, 1 1/4-inch	D.P. 1.20
No. 81	Bolt-on Type Horn Valve, 1 1/4-inch	D.P. 1.20
No. 82	Bolt-on Type Horn Valve, 1 1/4-inch	D.P. 1.20
No. 83	Bolt-on Type Horn Valve, 1 1/4-inch	D.P. 1.32
No. 84	Bolt-on Type Horn Valve, 1 1/4-inch	D.P. 1.32
No. 85	Bolt-on Type Horn Valve, 1 1/4-inch	D.P. 1.55
No. 86	Bolt-on Type Horn Valve, 2-inch	D.P. 1.55
No. 87	Bolt-on Type Horn Valve, 2 1/4-inch	D.P. 1.77
No. 88	Bolt-on Type Horn Valve, 2 1/4-inch	D.P. 1.77
No. 89	Bolt-on Type Horn Valve, 2 1/4-inch	D.P. 1.77
No. 90	Bolt-on Type Horn Valve, 2 1/4-inch	D.P. 1.77
No. 91	Bolt-on Type Horn Valve, 2 1/4-inch	D.P. 2.22
No. 92	Bolt-on Type Horn Valve, 2 1/4-inch	D.P. 2.22
No. 93	Bolt-on Type Horn Valve, 2 1/4-inch	D.P. 2.22
No. 94	Bolt-on Type Horn Valve, 3-inch	D.P. 2.22

Rudy Bolt-on Cut-out Valve



No. 200	Rudy Cut-out Valve, 1-inch, Smooth Bore, each	D.P. \$0.77
No. 201	Rudy Cut-out Valve, 1 1/4-inch, Smooth Bore, each	D.P. .77
No. 202	Rudy Cut-out Valve, 1 1/4-inch, Smooth Bore, each	D.P. .77
No. 203	Rudy Cut-out Valve, 1 1/4-inch, Smooth Bore, each	D.P. .77
No. 204	Rudy Cut-out Valve, 1 1/2-inch, Smooth Bore, each	D.P. .88
No. 205	Rudy Cut-out Valve, 1 1/2-inch, Smooth Bore, each	D.P. .88
No. 206	Rudy Cut-out Valve, 1 1/2-inch, Smooth Bore, each	D.P. .88
No. 207	Rudy Cut-out Valve, 1 1/2-inch, Smooth Bore, each	D.P. .88
No. 208	Rudy Cut-out Valve, 2-inch, Smooth Bore, each	D.P. 1.22
No. 209	Rudy Cut-out Valve, 2 1/4-inch, Smooth Bore, each	D.P. 1.22
No. 210	Rudy Cut-out Valve, 2 1/4-inch, Smooth Bore, each	D.P. 1.22
No. 211	Rudy Cut-out Valve, 2 1/4-inch, Smooth Bore, each	D.P. 1.22
No. 212	Rudy Cut-out Valve, 2 1/4-inch, Smooth Bore, each	D.P. 1.32
No. 213	Rudy Cut-out Valve, 2 1/4-inch, Smooth Bore, each	D.P. 1.32
No. 214	Rudy Cut-out Valve, 2 1/4-inch, Smooth Bore, each	D.P. 1.32
No. 215	Rudy Cut-out Valve, 2 1/4-inch, Smooth Bore, each	D.P. 1.32
No. 216	Rudy Cut-out Valve, 3-inch, Smooth Bore, each	D.P. 1.32

Style D Cut-out Valve



Style D Muffler Cut-out is very practical, as it is made of malleable iron and clamps on the exhaust pipe after a V-shaped hole has been cut in the pipe. The valve is in a pocket at the bottom and opens inwardly. It will not leak, as the conical valve is held against the seat by the pressure of the exhaust

in addition to the spring.

Prices and Sizes of Style "D" Cut-out Valves

Blanks	Blanks for I. P.	Bored Sizes	Blanks or Bore
No. 1	1-inch	1 1/2 or 1 1/4-inch	Price...D.P. \$1.84
No. 2	1 1/4-inch	1 1/4-inch	Price...D.P. 1.84
No. 3	1 1/4-inch	2 or 2 1/4-inch	Price...D.P. 1.84
No. 4	2-inch	2 1/4 or 2 1/2-inch	Price...D.P. 1.84
No. 5	2 1/4-inch	3 or 3 1/4-inch	Price...D.P. 2.22
No. 6	3-inch	3 1/4-inch	Price...D.P. 2.22

Numbers as shown under headings of "Blanks" refer to blanks only. These fit Standard Iron Pipe, or can be bored to fit steel tubing as shown in the table.



CUT-OUTS, PULLEYS, CABLES AND PEDALS

Gray Muffler Cut-out



In the Gray Muffler Cut-out the outlet is large and turned downward at an angle of 30 degrees which throws the exhaust backward and downward, preventing it raising the dust. It is attached by cutting a notch in the pipe and clamping the cut-out over the opening. The valve is held against its seat by a strong spring. The lever is adjustable and may be placed on either side. The cut-out is made of malleable iron throughout and is furnished to fit all sizes of exhaust pipes.

	Each
No. 5 To clamp over 1-in. iron pipe.....D.P.	\$2.48
No. 6 To clamp over 1½-in. iron pipe.....D.P.	2.75
No. 7 To clamp over 1½-in. iron pipe.....D.P.	2.90
No. 8 To clamp over 2-in. iron pipe.....D.P.	3.32
No. 5-A To clamp over 1½-in. steel tubing.....D.P.	2.48
No. 5-B To clamp over 1½-in. steel tubing.....D.P.	2.48
No. 6-A To clamp over 1½-in. steel tubing.....D.P.	2.75
No. 6-B To clamp over 1½-in. steel tubing.....D.P.	2.75
No. 7-A To clamp over 1½-in. steel tubing.....D.P.	2.90
No. 7-B To clamp over 2-in. steel tubing.....D.P.	2.90
No. 7-C To clamp over 2½-in. steel tubing.....D.P.	2.90
No. 7-D To clamp over 2½-in. steel tubing.....D.P.	2.90
No. 8-A To clamp over 2½-in. steel tubing.....D.P.	3.32
No. 8-B To clamp over 2½-in. steel tubing.....D.P.	3.32
No. 8-C To clamp over 2½-in. steel tubing.....D.P.	3.75
No. 8-D To clamp over 2½-in. steel tubing.....D.P.	3.75
No. 8-E To clamp over 2½-in. steel tubing.....D.P.	4.18
No. 8-F To clamp over 3-in. steel tubing.....D.P.	4.18

Pulleys



¾-in. Galvanized Swivel Pulleys, each.....	\$0.10
Dozen.....D.P.	\$1.54
1-in. Galvanized Swivel Pulleys, each.....	.15
Dozen.....D.P.	\$1.76

Chain Cable



Cable Chain for Pedal Connection to horns or cut-out valve. Heavily coppered to prevent rust and will not rust or stretch. Will last three times as long as wire cable and will run through an ordinary pulley more easily.

No. 8 Coppered Chain Cable, per ft.....	\$0.10
Per foot.....D.P.	\$0.08

Wire Cable



¾-in. Wire Cable for pedal connections to horn and cut-out valves, per ft.....	\$0.06
Per foot.....D.P.	\$0.06

Horn and Cut-out Pedals

This Pedal is in the nature of a heel button. It is very practical and neat. Intended for operating muffler cut-out. Finish: All black except heel button, which is nickel, brass or black, as ordered.



Style M

No. 1 Pedal Style M, black, each.....	\$0.25
Each.....D.P.	\$0.33
Dozen.....D.P.	\$3.32
No. 2 Pedal Style M, brass, each.....	.35
Each.....D.P.	\$0.44
Dozen.....D.P.	\$4.77
No. 3 Pedal Style M, nickel, each.....	.40
Each.....D.P.	\$0.44
Dozen.....D.P.	\$4.77



Style Y

This Pedal is similar to the "M" in construction and also used for the same purposes. It is equipped with a tension spring.

No. 4 Pedal Style Y, black, each.....	\$0.30
Each.....D.P.	\$0.33
Dozen.....D.P.	\$3.32
No. 5 Pedal Style Y, brass, each.....	.50
Each.....D.P.	\$0.44
Dozen.....D.P.	\$4.77
No. 6 Pedal Style Y, nickel, each.....	.60
Each.....D.P.	\$0.44
Dozen.....D.P.	\$4.77



Style G

This pedal is intended for operating horns, etc. It is a very neat and well designed pedal.

No. 7 Pedal Style G, black, each.....	\$0.25
Each.....D.P.	\$0.26
Dozen.....D.P.	\$2.77
No. 8 Pedal Style G, brass, each.....	.40
Each.....D.P.	\$0.33
Dozen.....D.P.	\$3.32
No. 9 Pedal Style G, nickel, each.....	.50
Each.....D.P.	\$0.33
Dozen.....D.P.	\$3.32



Style L

This is a substantial locking Pedal for cut-out and similar purposes. Locked and released by a tap of the foot.

No. 10 Pedal Style L, black, each.....	\$0.60
Each.....D.P.	\$0.66
Dozen.....D.P.	\$7.24
No. 11 Pedal Style L, brass, each.....	.90
Each.....D.P.	\$1.22
Dozen.....D.P.	\$13.32
No. 12 Pedal Style L, nickel, each.....	1.00
Each.....D.P.	\$1.32
Dozen.....D.P.	\$14.66



PEDAL PADS, MATTING AND HEEL PLATES

Horn and Cut-out Pedals



Style R

Style "R" is a very practical pedal for all purposes. The lower lever is operated by the pressure of the foot on the upper lever. By sliding the foot forward the travel of the lower lever increases, thereby opening the throttle, the foot resting in a comfortable position without strain. The floor plate is finished in black; the toe clip in either nickel, brass or black, as specified.

No. 13 Pedal Style R, black, each.....	\$0.50
Each.....D.P. \$0.55 Dozen.....D.P. \$6.10	
No. 14 Pedal Style R, brass, each.....	.80
Each.....D.P. \$0.88 Dozen.....D.P. \$9.44	
No. 15 Pedal Style R, nickel, each.....	.80
Each.....D.P. \$0.88 Dozen.....D.P. \$9.44	

This rolling Pedal is operated by a sliding motion of the foot forward or backward to open or close the throttle. There is a friction fulcrum which holds the pedal in a firm position after removing the foot and the position will not be changed until it is again moved by the foot. Finished in either nickel, brass or all black.



Style C

No. 16 Pedal Style C, black, each.....	\$0.66
Each.....D.P. \$0.66 Dozen.....D.P. \$7.22	
No. 17 Pedal Style C, brass, each.....	.80
Each.....D.P. \$0.88 Dozen.....D.P. \$9.44	
No. 18 Pedal Style C, nickel, each.....	.85
Each.....D.P. \$0.88 Dozen.....D.P. \$9.44	

Gray Lock Pedals

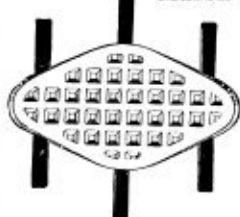


The most simple and durable Lock Pedal made. It is small, attractive and easy to operate. Push the button down and it locks—touch the catch and it releases.

To attach, simply bore a 3/8-in. hole in foot board—remove push rod and upper nut—slip the threaded part of Pedal through hole—screw the nut on top until catch is in desired position and the top of nut is flush with top of Pedal, then secure by tightening lower nut.

No. 19 Gray Lock Pedal, black, each.....	\$1.00
Each.....D.P. \$1.00 Dozen.....D.P. \$10.66	
No. 20 Gray Lock Pedal, brass, each.....	1.10
Each.....D.P. \$1.22 Dozen.....D.P. \$13.32	
No. 21 Gray Lock Pedal, nickel, each.....	1.20
Each.....D.P. \$1.33 Dozen.....D.P. \$14.44	
No. 22 Gray Pedal without Lock, black, each.....	.75
Each.....D.P. \$0.77 Dozen.....D.P. \$8.33	
No. 23 Gray Pedal without Lock, brass, each.....	.85
Each.....D.P. \$0.88 Dozen.....D.P. \$9.44	
No. 24 Gray Pedal without Lock, nickel, each.....	.90
Each.....D.P. \$1.00 Dozen.....D.P. \$10.00	

Mason-Allan Cushion Pedal Pads



QUICKLY ATTACHED



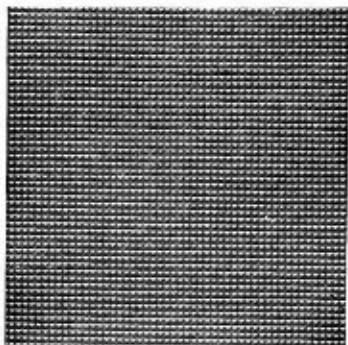
PERMANENTLY SECURED

Positively prevents feet from slipping off pedals. Scientifically designed for your comfort and safety. When moderate pressure is applied on pedal by sole of shoe, air is compressed in cells forming an air cushion which effectively absorbs all vibration and jar. Instantly attached. In moments of emergency, when strong pressure is exerted on pedal, the air is pressed out of cells and the resulting vacuum absolutely prevents the feet from slipping.

Mason-Allan Cushion Pedal Pads for any car, per set....\$1.00
Per set.....D.P. \$1.66

NOTE—When ordering give year and make of car.

Pyramid Rubber Matting



Price per square yard.....\$1.00
Per square yard.....D.P. \$3.88

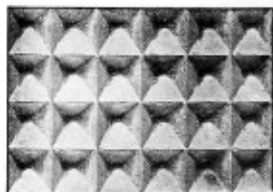
Aluminum Matting

Aluminum Matting does not rust, tarnish, nor stain from the effects of oil, grease or gasoline, as does rubber matting, and can always be restored to its original brightness when washing the car.

The Matting costs less than good rubber and lasts longer, and is very durable.

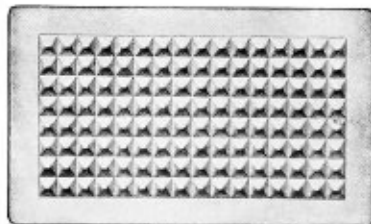
Aluminum Matting, 12 inches wide, per square foot.... \$0.60
Per square foot.....D.P. \$0.66

Aluminum Matting, 24 inches wide, per square foot....\$0.75
Per square foot.....D.P. \$0.66



Heel Plate

Aluminum Heel Plates 6x10 1/2 in. Made of heavy aluminum having 1/4-inch pyramid with 1/2-inch plain borders. Prevent wearing holes in floor covering.



Each.....\$0.75
Each.....D.P. \$0.88

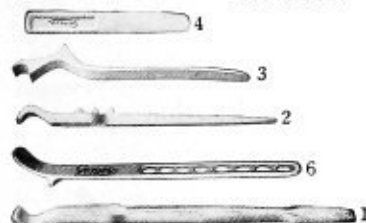
Ford Size Pyra Aluminum Heel Plates, 3 3/4x5-in., per pair \$0.50
Per pair.....D.P. \$0.78

Attach Pyra Aluminum Heel Plates to the rubber mat where heels rest when feet are on the pedals, and you will never need a new mat.



TIRE TOOLS

Tire Tools



No. 4 Tire Tool, 8 inches long, each.....	\$0.25
Each..D.P. \$0.18 Dozen..D.P. \$1.88	
No. 3 Tire Tool, 11 inches long, each.....	.35
Each..D.P. \$0.28 Dozen..D.P. \$3.11	
No. 2 Tire Tool, 13 inches long, each.....	.35
Each..D.P. \$0.26 Dozen..D.P. \$2.66	
No. 1 Tire Tool, 16½ inches long, each.....	.35
Each..D.P. \$0.37 Dozen..D.P. \$4.00	
No. 6 Tire Tool, 12 inches long, each.....	.30
Each..D.P. \$0.26 Dozen..D.P. \$2.66	

These Tire Tools are made of strong malleable iron and are very practical in putting on or removing tires from wheels or demountable rims.

Finish: Velvet Aluminum.



No. 5 Tire Tool, 14 inches long, each.....	.60
Each..D.P. \$0.55 Dozen..D.P. \$6.11	

Springfield Tire Tool



An adjustable tire tool, made to conform with the shape of all sizes of casings. Particularly adapted for loosening corroded casings from the rim. Made of malleable iron.

Springfield Tire Tool, price.....	\$1.25
Each..D.P. \$1.11 Dozen..D.P. \$12.22	

The Perfect Handle Tire Tool



13½ inches long, 1 inch tapering to ½ inch in width, ½ inch tapering to ⅜ inch in thickness, with a cute curved and round point tapered to ⅜ inch, to slip under the tire and heave it off in a jiffy. A regular "cuss" preventer for automobilists.

Each.....	\$1.00
Each..D.P. \$1.33 Dozen..D.P. \$14.44	

Auto Pry Bar



Octagon Tool Steel Bar, 14 inches long, one end straight and the other angled.

Auto Pry Bar, 14 inches, each.....	.25
Each..D.P. \$0.33	
Auto Pry Bar, 14 inches, each.....	.30
Each..D.P. \$0.40	
Auto Pry Bar, 14 inches, each.....	.35
Each..D.P. \$0.44	

Rim Tools



Tool Attached—Before Contracting

This tool makes the removal of tires comparatively easy. No matter how long the tire has been on the rim; no matter how old or rusty the rim may be, this tool will do its work quickly and easily. To operate, the hook ends are first inserted in holes drilled in the sides of the rim-base. The turnbuckle is then given a few turns, which contracts the rim-base. With the rim-base contracted, the tire comes off with the greatest ease.

Stanweld Tool for Transversely Split Rims, each...\$1.00

Each..D.P. \$1.77



Hick-Myer Auto Rim Tool, grips the rim, unlocks it, then pulls one-half of rim partly over other part, allowing tire to be easily removed. To replace tire just reverse operation.

Price, each.....	\$2.50
Each..D.P. \$4.44	

Mossberg Socket Brace



No. 360 Mossberg Socket Brace. Machinists have a decided tendency to favor braces for work around an engine, and legitimately so, for they are extremely efficient. If you use demountable rims and don't use these braces and Mossberg sockets, you are taking too much time in putting on tires. Made of finest steel, dull nickel plated, with ebonized wood handle and top 13 inches over all, and covered by the usual old-fashioned Mossberg guarantee.

Price, each.....	\$0.50
Each..D.P. \$0.84 Dozen..D.P. \$9.33	

Sockets any size for use with No. 360 Brace, each... .20

Dozen..D.P. \$3.11

"Gemco" Turn Buckle



The Turn Buckle is made of hardened steel and will fit any of the old Standard Dunlop or Midgely rims used back in 1904 and 1905, many of which are still in use.

No. 15 Turn Buckle, threaded ¾-inch, each.....	\$1.50
Each..D.P. \$2.11	
No. 16 Turn Buckle, threaded 5/16-inch, each.....	1.50
Each..D.P. \$2.11	



BALL BEARINGS

Fafnir Ball Bearings

Fafnir Ball Bearings, of which we carry a complete line, are the highest development in equipment of this class.

The balls and races are made from the highest grade steel, heat treated over a special process. The balls are held in specially designed races. All material and parts are selected and tested. Any showing the least defect is rejected, thus insuring bearings that will give great durability.



Wide Type, Light (200) Series

No.	Bore Inches	Diameter Inches	Width Inches	Price Each
200-A	0.3937	1.1811	0.3543	\$3.00
201-A	0.4724	1.2598	0.3937	3.20
202-A	0.5906	1.3780	0.4331	3.50
203-A	0.6693	1.5748	0.4724	4.00
204-A	0.7874	1.8504	0.5512	4.75
205-A	0.9843	2.0473	0.5905	5.25
206-A	1.1811	2.4410	0.6299	6.25
207-A	1.3780	2.8347	0.6693	6.85
208-A	1.5748	3.1496	0.7087	7.50
209-A	1.7717	3.3465	0.7480	9.00
210-A	1.9685	3.5433	0.7874	10.00
211-A	2.1654	3.9370	0.8268	12.50

Wide Type, Medium (300) Series

No.	Bore Inches	Diameter Inches	Width Inches	Price Each
300-A	0.3937	1.3780	0.4331	\$3.75
301-A	0.4724	1.4567	0.4724	4.00
302-A	0.5906	1.6536	0.5118	4.25
303-A	0.6693	1.8504	0.5512	5.00
304-A	0.7874	2.0473	0.5906	5.50
305-A	0.9843	2.4410	0.6299	6.00
306-A	1.1811	2.8347	0.7410	8.10
307-A	1.3780	3.1496	0.8268	9.50
308-A	1.5748	3.5433	0.9055	11.90
309-A	1.7717	3.9370	0.9843	14.50
310-A	1.9685	4.3307	1.0630	16.00
311-A	2.1654	4.7244	1.1417	18.00

Wide Type, Heavy (400) Series

No.	Bore Inches	Diameter Inches	Width Inches	Price Each
403-A	0.6693	2.4410	0.6693	\$7.50
404-A	0.7874	2.8347	0.7480	8.75
405-A	0.9843	3.1496	0.8268	10.50
406-A	1.1811	3.5433	0.9055	11.90
407-A	1.3780	3.9370	0.9843	13.75
408-A	1.5748	4.3307	1.0630	16.50
409-A	1.7717	4.7244	1.1417	19.50
410-A	1.9685	5.1181	1.2205	22.50
411-A	2.1654	5.5118	1.2992	26.50

Narrow Type, Light Series

No.	Bore Inches	Diameter Inches	Width Inches	Price Each
102-A	0.3937	1.2598	0.3543	\$3.75
103-A	0.5906	1.4567	0.3937	4.25
104-A	0.7874	1.6536	0.3937	4.75
105-A	0.9843	2.0473	0.3937	5.25
106-A	1.1811	2.4410	0.3937	6.25
107-A	1.3780	2.7559	0.3937	6.85
108-A	1.5748	3.1496	0.4831	7.50

Fafnir Ball Bearings

INSTRUCTIONS FOR ORDERING

When ordering be sure to give the bore diameter, outside diameter and width. Also give us the number and name of the old bearing that is to be replaced.

The Society of Automobile Engineers has standardized the ball bearing on all cars. We can therefore supply you with bearings for any make of car. Simply give us the name and location of the bearing.



Narrow Type, Medium Series

No.	Bore Inches	Diameter Inches	Width Inches	Price Each
1-A	0.4724	1.4567	0.3543	\$4.75
2-A	0.5906	1.6536	0.3543	5.00
3-A	0.7874	2.0473	0.3937	5.90
4-A	0.9843	2.4410	0.4724	6.90
5-A	1.1811	2.8347	0.5118	8.10
6-A	1.3780	3.1496	0.5512	9.50
7-A	1.5748	3.5433	0.6299	11.90
8-A	1.7717	3.9370	0.6693	15.40
9-A	1.9685	4.3307	0.7480	16.90
10-A	2.1654	4.6063	0.7480	18.25
11-A	2.3622	5.0000	0.7874	20.90

Narrow Type, Heavy Series

No.	Bore Inches	Diameter Inches	Width Inches	Price Each
52-A	0.7874	2.5591	0.5512	\$7.50
53-A	0.8661	2.8347	0.6299	8.75
54-A	0.9843	3.1496	0.6693	10.60
55-A	1.0630	3.4646	0.7480	11.90
56-A	1.1811	3.7402	0.7874	13.75
57-A	1.3780	4.0551	0.8661	17.50

Two Row Radial Bearings, Light Series

No.	Bore Inches	Diameter Inches	Width Inches	Price Each
6200	0.3937	1.1811	0.5512	\$6.20
6201	0.4724	1.2598	0.5512	6.50
6202	0.5906	1.3780	0.5512	6.75
6203	0.6693	1.5748	0.5905	7.60
6204	0.7874	1.8504	0.6693	8.00
6205	0.9843	2.0473	0.7087	8.60
6206	1.1811	2.4410	0.7874	10.30
6207	1.3780	2.8347	0.9055	11.50
6208	1.5748	3.1496	0.9055	12.40
6209	1.7717	3.3465	0.9055	15.00
6210	1.9685	3.5433	0.9055	16.00
6211	2.1654	3.9370	0.9843	20.50

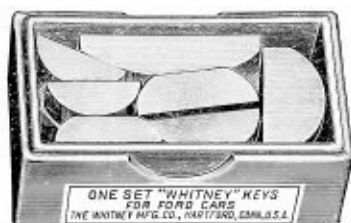
Two Row Radial Bearings, Medium Series

No.	Bore Inches	Diameter Inches	Width Inches	Price Each
6300	0.3937	1.3780	0.6693	\$6.70
6301	0.4724	1.4567	0.6693	7.10
6302	0.5906	1.6536	0.6693	7.50
6303	0.6693	1.8504	0.7480	8.50
6304	0.7874	2.0473	0.8268	10.00
6305	0.9843	2.4410	0.9449	11.60
6306	1.1811	2.8347	1.0630	13.70
6307	1.3780	3.1496	1.2205	16.00



KEYS AND BALLS

Whitney Keys



Ford Assortment Whitney Keys. Box contains 12 keys, being one complete set for a Ford.

Per Box\$0.50
Per Box.....D.P. \$0.55



100 Assortment Whitney Keys. Assorted in sizes in general use.

Per box\$3.00
Per Box.....D.P. \$3.89

Whitney Keys in Bulk

	Size	Per Doz.	Per 100
No. 1	Whitney Keys, $\frac{1}{2}$ x $\frac{1}{16}$ D.P.	\$0.23	D.P. \$0.89
No. 2	Whitney Keys, $\frac{1}{2}$ x $\frac{3}{32}$ D.P.	.23	D.P. .89
No. 3	Whitney Keys, $\frac{1}{2}$ x $\frac{1}{4}$ D.P.	.23	D.P. .89
No. 4	Whitney Keys, $\frac{1}{2}$ x $\frac{3}{32}$ D.P.	.23	D.P. .89
No. 5	Whitney Keys, $\frac{1}{2}$ x $\frac{1}{4}$ D.P.	.23	D.P. .89
No. 6	Whitney Keys, $\frac{1}{2}$ x $\frac{5}{32}$ D.P.	.23	D.P. .89
No. 7	Whitney Keys, $\frac{1}{2}$ x $\frac{1}{4}$ D.P.	.23	D.P. .89
No. 8	Whitney Keys, $\frac{1}{2}$ x $\frac{5}{32}$ D.P.	.27	D.P. 1.00
No. 9	Whitney Keys, $\frac{1}{2}$ x $\frac{3}{16}$ D.P.	.27	D.P. 1.00
No. 10	Whitney Keys, $\frac{1}{2}$ x $\frac{5}{32}$ D.P.	.27	D.P. 1.45
No. 11	Whitney Keys, $\frac{1}{2}$ x $\frac{3}{16}$ D.P.	.27	D.P. 1.45
No. 12	Whitney Keys, $\frac{1}{2}$ x $\frac{7}{32}$ D.P.	.27	D.P. 1.45
No. A	Whitney Keys, $\frac{1}{2}$ x $\frac{1}{4}$ D.P.	.27	D.P. 1.45
No. 13	Whitney Keys, $\frac{1}{2}$ x $\frac{3}{16}$ D.P.	.27	D.P. 1.56
No. 14	Whitney Keys, $\frac{1}{2}$ x $\frac{7}{32}$ D.P.	.34	D.P. 1.78
No. 15	Whitney Keys, $\frac{1}{2}$ x $\frac{1}{4}$ D.P.	.34	D.P. 1.78
No. B	Whitney Keys, $\frac{1}{2}$ x $\frac{5}{16}$ D.P.	.34	D.P. 1.78
No. 16	Whitney Keys, $\frac{1}{2}$ x $\frac{3}{16}$ D.P.	.34	D.P. 2.00
No. 17	Whitney Keys, $\frac{1}{2}$ x $\frac{7}{32}$ D.P.	.34	D.P. 2.00
No. 18	Whitney Keys, $\frac{1}{2}$ x $\frac{1}{4}$ D.P.	.34	D.P. 2.00
No. C	Whitney Keys, $\frac{1}{2}$ x $\frac{5}{16}$ D.P.	.34	D.P. 2.22

Tool Steel Balls



Inches	Steel Balls in Metal Boxes	Price Per 100
$\frac{1}{8}$	Steel Balls, packed 1000 in box.....	\$0.25
	Per 100.....D.P. \$0.23	Per Box.....D.P. \$1.78
5/32	Steel Balls, packed 1000 in box.....	.25
	Per 100.....D.P. \$0.34	Per Box.....D.P. \$2.44
3/16	Steel Balls, packed 1000 in box.....	.30
	Per 100.....D.P. \$0.36	Per Box.....D.P. \$3.00
7/32	Steel Balls, packed 500 in box.....	.40
	Per 100.....D.P. \$0.45	Per Box.....D.P. \$1.67
$\frac{1}{2}$	Steel Balls, packed 500 in box.....	.40
	Per 100.....D.P. \$0.45	Per Box.....D.P. \$1.89
9/32	Steel Balls, packed 250 in box.....	.60
	Per 100.....D.P. \$0.67	Per Box.....D.P. \$1.56
5/16	Steel Balls, packed 250 in box.....	.75
	Per 100.....D.P. \$0.78	Per Box.....D.P. \$1.89
11/32	Steel Balls, packed 100 in box.....	.80
	Per Doz.....D.P. \$0.23	Per Box.....D.P. \$1.34
$\frac{3}{4}$	Steel Balls, packed 100 in box.....	.85
	Per Doz.....D.P. \$0.23	Per Box.....D.P. \$1.45
7/16	Steel Balls, packed 100 in box.....	3.00
	Per Doz.....D.P. \$0.40	Per Box.....D.P. \$2.22
$\frac{1}{2}$	Steel Balls, packed 50 in box.....	3.00
	Per Doz.....D.P. \$0.45	Per Box.....D.P. \$1.67
9/16	Steel Balls, packed 35 in box.....	3.50
	Per Doz.....D.P. \$0.67	Per Box.....D.P. \$1.45
$\frac{3}{4}$	Steel Balls, packed 25 in box.....	4.00
	Per Doz.....D.P. \$0.67	Per Box.....D.P. \$1.00
11/16	Steel Balls, packed 25 in box.....	5.00
	Per Doz.....D.P. \$0.89	Per Box.....D.P. \$1.45
$\frac{1}{2}$	Steel Balls, packed 15 in box.....	7.00
	Per Doz.....D.P. \$1.07	Per Box.....D.P. \$1.22
13/16	Steel Balls, packed 15 in box.....	7.50
	Per Doz.....D.P. \$1.34	Per Box.....D.P. \$1.50
$\frac{3}{4}$	Steel Balls, packed 10 in box.....	10.00
	Per Doz.....D.P. \$1.34	Per Box.....D.P. \$1.11

Ball Joints

Non-Adjustable Ball Joints. Used extensively for connecting carburetors and timers with levers on steering wheel.



No.	Ball Inside Diam.	Stem Thread	Socket	Screw Outside Diam.	Thread	Each
1	$\frac{1}{2}$	32	9/32	$\frac{5}{16}$	18	\$0.25
2	$\frac{1}{2}$	20	9/32	$\frac{5}{16}$	18	.25
3	$\frac{1}{2}$	24	9/32	$\frac{1}{2}$	27	.25
4	$\frac{1}{2}$	27	9/32	$\frac{1}{2}$	27	.25
5	$\frac{1}{2}$	28	9/32	$\frac{1}{2}$	28	.25
6	$\frac{1}{2}$	20	5/16	$\frac{1}{2}$	16	.25
7	$\frac{1}{2}$	20	9/32	$\frac{1}{2}$	20	.25
8	$\frac{3}{16}$	32	9/32	$\frac{3}{16}$	32	.25
9	$\frac{7}{32}$	32	9/32	$\frac{7}{32}$	32	.25
All sizes—Per Doz.....D.P. \$1.78; Per 100.....D.P. \$14.43						
Adjustable Ball Joints, $\frac{1}{2}$ x 28, A. L. A. M., each.....\$0.25						
Adjustable Ball Joints, $\frac{1}{2}$ x 20, U. S., each......25						
Per Doz.....D.P. \$2.22 Per 100.....D.P. \$16.65						



DIAMOND AUTOMOBILE AND MOTOR TRUCK CHAINS



Detachable Type

Cotter Pin
Connecting Link

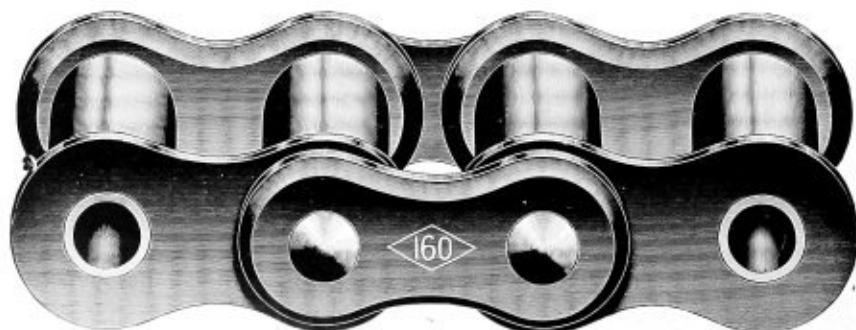
Chain No.	Pitch In.	Diameter of Roller, in.	Width of Roller, in.	Per ft.	Connecting Links, each	Roller Links, each	Offset Links, each
153	2	15/32	2	\$0.75	\$0.14	\$0.133	\$0.30
				D.P. \$1.33	D.P. \$0.20	D.P. \$0.20	D.P. \$0.45
153	2	15/32	2	.79	.14	.14	.31
				D.P. 1.40	D.P. .20	D.P. .20	D.P. .47
153	2	15/32	2	.86	.14	.15	.32
				D.P. 1.53	D.P. .20	D.P. .23	D.P. .47
155	1	9/16	2	.78	.14	.15	.34
				D.P. 1.38	D.P. .20	D.P. .23	D.P. .51
155	1	9/16	2	.78	.14	.16	.35
				D.P. 1.38	D.P. .20	D.P. .25	D.P. .51
155	1	9/16	2	.85	.16	.17	.36
				D.P. 1.51	D.P. .25	D.P. .25	D.P. .54
156	1	5/8	2	.83	.16	.16	.36
				D.P. 1.47	D.P. .20	D.P. .25	D.P. .54
156	1	5/8	2	.90	.16	.17	.37
				D.P. 1.60	D.P. .25	D.P. .25	D.P. .56
154	1	5/8	2	.83	.18	.17	.48
				D.P. 1.47	D.P. .27	D.P. .25	D.P. .71
154	1	5/8	2	.90	.18	.18	.50
				D.P. 1.60	D.P. .27	D.P. .27	D.P. .74
151	1 1/2	5/8	2	.93	.20	.20	.56
				D.P. 1.64	D.P. .29	D.P. .29	D.P. .54
151	1 1/2	5/8	2	.93	.20	.21	.58
				D.P. 1.64	D.P. .29	D.P. .31	D.P. .56
151	1 1/2	5/8	2	1.05	.20	.22	.60
				D.P. 1.87	D.P. .29	D.P. .34	D.P. .60
152	1 1/2	2	2	1.00	.20	.21	.58
				D.P. 1.78	D.P. .29	D.P. .31	D.P. .56
152	1 1/2	2	2	1.15	.20	.22	.60
				D.P. 2.04	D.P. .29	D.P. .34	D.P. .60
160	1 1/2	2	2	1.00	.26	.25	1.10
				D.P. 1.78	D.P. .38	D.P. .38	D.P. 1.62
160	1 1/2	2	2	1.15	.26	.26	1.10
				D.P. 2.04	D.P. .38	D.P. .38	D.P. 1.62
157	1 1/2	2	2	1.20	.28	.26	.50
				D.P. 2.13	D.P. .42	D.P. .38	D.P. .74
157	1 1/2	2	2	1.20	.28	.28	.52
				D.P. 2.13	D.P. .42	D.P. .42	D.P. .78
157	1 1/2	2	1	1.38	.30	.30	.54
				D.P. 2.27	D.P. .45	D.P. .45	D.P. .80
162	1 1/2	2	2	1.28	.35	.36	1.20
				D.P. 2.27	D.P. .51	D.P. .53	D.P. 1.78
162	1 1/2	2	1	1.41	.35	.40	1.20
				D.P. 2.51	D.P. .51	D.P. .53	D.P. 1.78
159	1 1/2	1	1	1.58	.40	.46	1.30
				D.P. 2.80	D.P. .60	D.P. .69	D.P. 1.93
164	1 1/2	1	1 (heavy)	1.58	.44	.50	1.30
				D.P. 2.80	D.P. .65	D.P. .74	D.P. 1.93
167	2	1 1/2	1 1/2	1.88	.46	.62	1.50
				D.P. 3.33	D.P. .69	D.P. .91	D.P. 2.22
168	2	1 1/2	1 1/2 (heavy)	1.88	.50	.70	1.50
				D.P. 3.33	D.P. .73	D.P. 1.05	D.P. 2.22
301	1	9/16	2	.85	.16	.17	.36
				D.P. 1.51	D.P. .25	D.P. .25	D.P. .54

Connecting Link for
Detachable Chains

Offset Link



Roller Link



Riveted Type



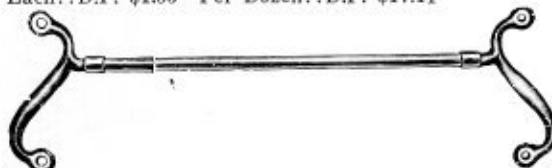
RAILS AND MOULDING

Robe Rails



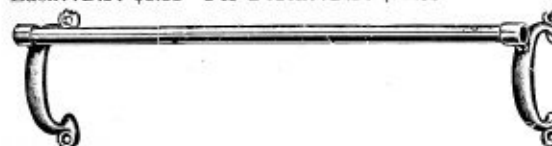
No. 102 Folding Robe Rail Brass Tube with black enameled handles, each\$1.25
Each..D.P. \$1.44 Per Dozen..D.P. \$15.55

No. 1102 Folding Robe Rail Nickeled Tube with black enameled handles, each 1.50
Each..D.P. \$1.55 Per Dozen..D.P. \$17.11



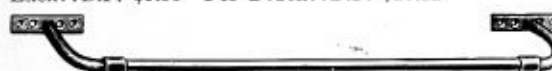
No. 332 S Handle Robe Rail Brass Tube with black enameled handles, each 1.50
Each..D.P. \$1.11 Per Dozen..D.P. \$12.33

No. 1332 S Handle Robe Rail Nickeled Tube with black enameled handles, each 2.00
Each..D.P. \$1.11 Per Dozen..D.P. \$12.33



No. 4862 D Handle Robe Rail Brass Tube with black enameled handles, each 1.50
Each..D.P. \$1.44 Per Dozen..D.P. \$15.55

No. 24862 D Handle Robe Rail Nickeled Tube with black enameled handles, each 2.00
Each..D.P. \$1.55 Per Dozen..D.P. \$17.11



No. 4902 Robe Rail. Made particularly for cars with metal body where bracket must fasten to top rail or frame of seat. Brass rail with black brackets, each 1.50
Each..D.P. \$1.44 Per Dozen..D.P. \$15.55

No. 24902, Same style as above with nickeled rail and black handles, each 2.00
Each..D.P. \$1.55 Per Dozen..D.P. \$17.11

Foot Rails



No. 60 All Brass Foot Rail, each\$1.75
Each..D.P. \$1.88 Per Dozen..D.P. \$21.33

No. 61 Foot Rail Black Enamel Ends, nickeled rail, each 1.75
Each..D.P. \$2.00 Per Dozen..D.P. \$22.22

Alite Moulding



No. 1
85° 90°



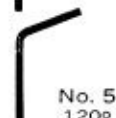
No. 2



No. 3



No. 4
50°



No. 5
120°



No. 6



No. 7



No. 9



No. 10



No. 11



No. 12



No. 13



No. 14



No. 15



No. 17



No. 18
120°



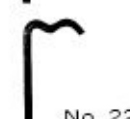
No. 19
55°



No. 20
65°



No. 21



No. 22



No. 23

Alite Metal Running Board and Floor Board Moulding is an all white, rustless metal moulding that can be supplied in all the patterns illustrated above. All sizes come in 10-foot lengths.

Per foot\$.18
Per Foot..D.P. \$0.18



BRAKE BAND LINING

Gibson Quality Brake Band Lining



This lining is composed of asbestos—that fire-proof, indestructible mineral—reinforced with brass wires interwoven in each strand.

That is why heat from friction which chars and burns ordinary brake linings will not affect it.

And asbestos to metal—that is why it will lock wheels instantly when emergency demands, yet will stop car just as slowly as you wish.

Made to fit any brake and any friction or transmission clutch.

	Per ft.
Gibson Quality Brake Band Lining, 1x $\frac{1}{2}$ in.....	\$0.32
Per ft., D.P. \$0.20 50-ft. lengths, per ft., D.P. \$0.18	
Gibson Quality Brake Band Lining, 1 $\frac{1}{4}$ x $\frac{1}{2}$ in.....	.36
Per ft., D.P. \$0.25 50-ft. lengths, per ft., D.P. \$0.23	
Gibson Quality Brake Band Lining, 1 $\frac{1}{2}$ x $\frac{1}{2}$ in.....	.40
Per ft., D.P. \$0.27 50-ft. lengths, per ft., D.P. \$0.25	
Gibson Quality Brake Band Lining, 1 $\frac{3}{4}$ x $\frac{1}{2}$ in.....	.46
Per ft., D.P. \$0.31 50-ft. lengths, per ft., D.P. \$0.29	
Gibson Quality Brake Band Lining, 2x $\frac{1}{2}$ in.....	.52
Per ft., D.P. \$0.34 50-ft. lengths, per ft., D.P. \$0.31	
Gibson Quality Brake Band Lining, 2 $\frac{1}{4}$ x $\frac{1}{2}$ in.....	.58
Per ft., D.P. \$0.40 50-ft. lengths, per ft., D.P. \$0.36	
Gibson Quality Brake Band Lining, 2 $\frac{1}{2}$ x $\frac{1}{2}$ in.....	.64
Per ft., D.P. \$0.45 50-ft. lengths, per ft., D.P. \$0.40	
Gibson Quality Brake Band Lining, 3x $\frac{1}{2}$ in.....	.74
Per ft., D.P. \$0.49 50-ft. lengths, per ft., D.P. \$0.45	
Gibson Quality Brake Band Lining, 4x $\frac{1}{2}$ in.....	.92
Per ft., D.P. \$0.62 50-ft. lengths, per ft., D.P. \$0.56	
Gibson Quality Brake Band Lining, 1x5/32 in.....	.36
Per ft., D.P. \$0.25 50-ft. lengths, per ft., D.P. \$0.23	
Gibson Quality Brake Band Lining, 1 $\frac{1}{4}$ x5/32 in.....	.42
Per ft., D.P. \$0.29 50-ft. lengths, per ft., D.P. \$0.27	
Gibson Quality Brake Band Lining, 1 $\frac{1}{2}$ x5/32 in.....	.48
Per ft., D.P. \$0.34 50-ft. lengths, per ft., D.P. \$0.30	
Gibson Quality Brake Band Lining, 1 $\frac{3}{4}$ x5/32 in.....	.56
Per ft., D.P. \$0.38 50-ft. lengths, per ft., D.P. \$0.34	
Gibson Quality Brake Band Lining, 2x5/32 in.....	.64
Per ft., D.P. \$0.45 50-ft. lengths, per ft., D.P. \$0.40	

Gibson Quality Brake Band Lining

	Per ft.
Gibson Quality Brake Band Lining, 2 $\frac{1}{4}$ x5/32 in.....	\$0.72
Per ft., D.P. \$0.49 50-ft. lengths, per ft., D.P. \$0.45	
Gibson Quality Brake Band Lining, 2 $\frac{1}{2}$ x5/32 in.....	.80
Per ft., D.P. \$0.53 50-ft. lengths, per ft., D.P. \$0.49	
Gibson Quality Brake Band Lining, 3x5/32 in.....	.94
Per ft., D.P. \$0.65 50-ft. lengths, per ft., D.P. \$0.60	
Gibson Quality Brake Band Lining, 4x5/32 in.....	1.20
Per ft., D.P. \$0.80 50-ft. lengths, per ft., D.P. \$0.73	
Gibson Quality Brake Band Lining, 1x $\frac{3}{4}$ in.....	.42
Per ft., D.P. \$0.29 50-ft. lengths, per ft., D.P. \$0.27	
Gibson Quality Brake Band Lining, 1 $\frac{1}{4}$ x $\frac{3}{4}$ in.....	.50
Per ft., D.P. \$0.34 50-ft. lengths, per ft., D.P. \$0.30	
Gibson Quality Brake Band Lining, 1 $\frac{1}{2}$ x $\frac{3}{4}$ in.....	.58
Per ft., D.P. \$0.40 50-ft. lengths, per ft., D.P. \$0.36	
Gibson Quality Brake Band Lining, 1 $\frac{3}{4}$ x $\frac{3}{4}$ in.....	.68
Per ft., D.P. \$0.47 50-ft. lengths, per ft., D.P. \$0.42	
Gibson Quality Brake Band Lining, 2x $\frac{3}{4}$ in.....	.76
Per ft., D.P. \$0.51 50-ft. lengths, per ft., D.P. \$0.47	
Gibson Quality Brake Band Lining, 2 $\frac{1}{4}$ x $\frac{3}{4}$ in.....	.84
Per ft., D.P. \$0.56 50-ft. lengths, per ft., D.P. \$0.51	
Gibson Quality Brake Band Lining, 2 $\frac{1}{2}$ x $\frac{3}{4}$ in.....	.94
Per ft., D.P. \$0.65 50-ft. lengths, per ft., D.P. \$0.58	
Gibson Quality Brake Band Lining, 2 $\frac{3}{4}$ x $\frac{3}{4}$ in.....	1.04
Per ft., D.P. \$0.71 50-ft. lengths, per ft., D.P. \$0.65	
Gibson Quality Brake Band Lining, 3x $\frac{3}{4}$ in.....	1.12
Per ft., D.P. \$0.76 50-ft. lengths, per ft., D.P. \$0.69	
Gibson Quality Brake Band Lining, 4x $\frac{3}{4}$ in.....	1.44
Per ft., D.P. \$0.96 50-ft. lengths, per ft., D.P. \$0.87	
Gibson Quality Brake Band Lining, 1x $\frac{1}{2}$ in.....	.56
Per ft., D.P. \$0.36 50-ft. lengths, per ft., D.P. \$0.34	
Gibson Quality Brake Band Lining, 1 $\frac{1}{4}$ x $\frac{1}{2}$ in.....	.66
Per ft., D.P. \$0.45 50-ft. lengths, per ft., D.P. \$0.40	
Gibson Quality Brake Band Lining, 1 $\frac{1}{2}$ x $\frac{1}{2}$ in.....	.76
Per ft., D.P. \$0.51 50-ft. lengths, per ft., D.P. \$0.47	
Gibson Quality Brake Band Lining, 1 $\frac{3}{4}$ x $\frac{1}{2}$ in.....	.88
Per ft., D.P. \$0.60 50-ft. lengths, per ft., D.P. \$0.53	
Gibson Quality Brake Band Lining, 2x $\frac{1}{2}$ in.....	1.00
Per ft., D.P. \$0.67 50-ft. lengths, per ft., D.P. \$0.60	
Gibson Quality Brake Band Lining, 2 $\frac{1}{4}$ x $\frac{1}{2}$ in.....	1.12
Per ft., D.P. \$0.76 50-ft. lengths, per ft., D.P. \$0.69	
Gibson Quality Brake Band Lining, 2 $\frac{1}{2}$ x $\frac{1}{2}$ in.....	1.24
Per ft., D.P. \$0.82 50-ft. lengths, per ft., D.P. \$0.76	
Gibson Quality Brake Band Lining, 2 $\frac{3}{4}$ x $\frac{1}{2}$ in.....	1.36
Per ft., D.P. \$0.89 50-ft. lengths, per ft., D.P. \$0.80	
Gibson Quality Brake Band Lining, 3x $\frac{1}{2}$ in.....	1.46
Per ft., D.P. \$0.98 50-ft. lengths, per ft., D.P. \$0.89	
Gibson Quality Brake Band Lining, 4x $\frac{1}{2}$ in.....	1.88
Per ft., D.P. \$1.27 50-ft. lengths, per ft., D.P. \$1.16	



BRAKE BAND LINING

Thermoid Hydraulic Compressed Brake Band Lining

Thermoid
HYDRAULIC COMPRESSED
Brake Lining - 100%



Brake Lining Must Be Dependable

nated with a wondrous secret friction compound—forced through every pore.

Then it is compressed and cured at 2,000 pounds pressure for one hour, at intense heat.

Is brake lining all the way through—just the same inside as out. Therefore it is dependable as long as any of it remains. That's why it is 100 per cent; why it's the best to sell—the best to buy.

Thermoid is constructed of pure Canadian asbestos, interwoven with solid brass wire.

Under giant heated rolls it is impreg-

nated with a wondrous secret friction compound—forced through every pore.

Then it is compressed and cured at 2,000 pounds pressure for one hour, at intense heat.

	Per ft.
Thermoid Brake Band Lining, 1x $\frac{1}{2}$ in.....	\$0.40
Per ft., D.P. \$0.27 50-ft. lengths, per ft., D.P. \$0.24	
Thermoid Brake Band Lining, 1 $\frac{1}{4}$ x $\frac{1}{2}$ in.....	.50
Per ft., D.P. \$0.34 50-ft. lengths, per ft., D.P. \$0.30	
Thermoid Brake Band Lining, 1 $\frac{1}{2}$ x $\frac{1}{2}$ in.....	.60
Per ft., D.P. \$0.40 50-ft. lengths, per ft., D.P. \$0.37	
Thermoid Brake Band Lining, 1 $\frac{3}{4}$ x $\frac{1}{2}$ in.....	.70
Per ft., D.P. \$0.47 50-ft. lengths, per ft., D.P. \$0.42	
Thermoid Brake Band Lining, 2x $\frac{1}{2}$ in.....	.80
Per ft., D.P. \$0.53 50-ft. lengths, per ft., D.P. \$0.49	
Thermoid Brake Band Lining, 2 $\frac{1}{4}$ x $\frac{1}{2}$ in.....	.90
Per ft., D.P. \$0.60 50-ft. lengths, per ft., D.P. \$0.56	
Thermoid Brake Band Lining, 2 $\frac{1}{2}$ x $\frac{1}{2}$ in.....	1.00
Per ft., D.P. \$0.67 50-ft. lengths, per ft., D.P. \$0.60	
Thermoid Brake Band Lining, 1x5/32 in.....	.45
Per ft., D.P. \$0.30 50-ft. lengths, per ft., D.P. \$0.27	
Thermoid Brake Band Lining, 1 $\frac{1}{4}$ x5/32 in.....	.55
Per ft., D.P. \$0.37 50-ft. lengths, per ft., D.P. \$0.34	
Thermoid Brake Band Lining, 1 $\frac{1}{2}$ x5/32 in.....	.65
Per ft., D.P. \$0.44 50-ft. lengths, per ft., D.P. \$0.40	
Thermoid Brake Band Lining, 1 $\frac{3}{4}$ x5/32 in.....	.75
Per ft., D.P. \$0.50 50-ft. lengths, per ft., D.P. \$0.45	
Thermoid Brake Band Lining, 2x5/32 in.....	.85
Per ft., D.P. \$0.57 50-ft. lengths, per ft., D.P. \$0.51	
Thermoid Brake Band Lining, 2 $\frac{1}{4}$ x5/32 in.....	.95
Per ft., D.P. \$0.63 50-ft. lengths, per ft., D.P. \$0.58	
Thermoid Brake Band Lining, 2 $\frac{1}{2}$ x5/32 in.....	1.05
Per ft., D.P. \$0.71 50-ft. lengths, per ft., D.P. \$0.62	

Thermoid Hydraulic Compressed Brake Band Lining

	Per ft.
Thermoid Brake Band Lining, 2 $\frac{1}{4}$ x5/32 in.....	\$1.15
Per ft., D.P. \$0.78 50-ft. lengths, per ft., D.P. \$0.71	
Thermoid Brake Band Lining, 1x $\frac{3}{8}$ in.....	.50
Per ft., D.P. \$0.34 50-ft. lengths, per ft., D.P. \$0.30	
Thermoid Brake Band Lining, 1 $\frac{1}{4}$ x $\frac{3}{8}$ in.....	.60
Per ft., D.P. \$0.40 50-ft. lengths, per ft., D.P. \$0.36	
Thermoid Brake Band Lining, 1 $\frac{1}{2}$ x $\frac{3}{8}$ in.....	.70
Per ft., D.P. \$0.47 50-ft. lengths, per ft., D.P. \$0.42	
Thermoid Brake Band Lining, 1 $\frac{3}{4}$ x $\frac{3}{8}$ in.....	.80
Per ft., D.P. \$0.53 50-ft. lengths, per ft., D.P. \$0.49	
Thermoid Brake Band Lining, 2x $\frac{3}{8}$ in.....	.90
Per ft., D.P. \$0.60 50-ft. lengths, per ft., D.P. \$0.56	
Thermoid Brake Band Lining, 2 $\frac{1}{4}$ x $\frac{3}{8}$ in.....	1.00
Per ft., D.P. \$0.67 50-ft. lengths, per ft., D.P. \$0.60	
Thermoid Brake Band Lining, 2 $\frac{1}{2}$ x $\frac{3}{8}$ in.....	1.10
Per ft., D.P. \$0.73 50-ft. lengths, per ft., D.P. \$0.67	
Thermoid Brake Band Lining, 2 $\frac{3}{4}$ x $\frac{3}{8}$ in.....	1.20
Per ft., D.P. \$0.80 50-ft. lengths, per ft., D.P. \$0.73	
Thermoid Brake Band Lining, 3x $\frac{3}{8}$ in.....	1.30
Per ft., D.P. \$0.87 50-ft. lengths, per ft., D.P. \$0.80	
Thermoid Brake Band Lining, 4x $\frac{3}{8}$ in.....	1.70
Per ft., D.P. \$1.13 50-ft. lengths, per ft., D.P. \$1.02	
Thermoid Brake Band Lining, 1 $\frac{1}{4}$ x $\frac{1}{2}$ in.....	.80
Per ft., D.P. \$0.53 50-ft. lengths, per ft., D.P. \$0.49	
Thermoid Brake Band Lining, 1 $\frac{1}{2}$ x $\frac{1}{2}$ in.....	.90
Per ft., D.P. \$0.60 50-ft. lengths, per ft., D.P. \$0.56	
Thermoid Brake Band Lining, 1 $\frac{3}{4}$ x $\frac{1}{2}$ in.....	1.00
Per ft., D.P. \$0.67 50-ft. lengths, per ft., D.P. \$0.60	
Thermoid Brake Band Lining, 2x $\frac{1}{2}$ in.....	1.20
Per ft., D.P. \$0.80 50-ft. lengths, per ft., D.P. \$0.73	
Thermoid Brake Band Lining, 2 $\frac{1}{4}$ x $\frac{1}{2}$ in.....	1.30
Per ft., D.P. \$0.87 50-ft. lengths, per ft., D.P. \$0.80	
Thermoid Brake Band Lining, 2 $\frac{1}{2}$ x $\frac{1}{2}$ in.....	1.50
Per ft., D.P. \$1.00 50-ft. lengths, per ft., D.P. \$0.91	
Thermoid Brake Band Lining, 2 $\frac{3}{4}$ x $\frac{1}{2}$ in.....	1.60
Per ft., D.P. \$1.07 50-ft. lengths, per ft., D.P. \$0.98	
Thermoid Brake Band Lining, 3x $\frac{1}{2}$ in.....	1.70
Per ft., D.P. \$1.13 50-ft. lengths, per ft., D.P. \$1.02	
Thermoid Brake Band Lining, 4x $\frac{1}{2}$ in.....	2.20
Per ft., D.P. \$1.47 50-ft. lengths, per ft., D.P. \$1.33	

Safety First!



Unreliable Brake Lining Is a Deadly Peril



ASBESTOS PRODUCTS AND FIBER



Wire Woven Asbestos Packing

Asbestos Sheet Packing, durable and efficient; will not blow out; the most reliable flat packing for gas and gasoline engines. Comes in rolls 40 inches wide, $\frac{1}{8}$ -inch thick; weight about four pounds per square yard.

Per pound.....\$1.50
Per Pound..D.P. \$1.11

Mogul Rope Packing

This packing is made in braided or twisted form from absolutely pure asbestos yarn. Each strand is thoroughly lubricated, insuring minimum friction. It is fireproof, oil-proof, pressure-proof and practically wear-proof. Put up in $\frac{1}{4}$ -lb. spools.

Each.....\$0.50
Per Spool..D.P. \$0.55



Asbestos Wicking

A loosely woven asbestos wick, adapted for various uses on automobiles, motor boats, etc., and used for packing exhaust and water pipes. Put up in $\frac{1}{4}$ -lb. balls.

Each.....\$0.25
Per Ball..D.P. \$0.40



Asbestos Cord

Nos. 629 Asbestos Cord

$\frac{1}{8}$ -inch diameter.

For packing spark plugs and minor parts, in place of copper ring gaskets.

Boxes of 1 dozen spools (weight 1 lb.).....\$4.00

Per Spool..D.P. \$0.55

Per Dozen Spools..D.P. \$5.33



Solderall



Solderall is a complete solder and non-corrosive flux, combined in paste form. It can be carried in the pocket like a screw driver. With the aid of a match a perfect joint can be made. It is the easiest thing to solder with in difficult places. Clean in handling, no waste in using. Solderall is a necessity in the kit of every automobile. For joining wires, stopping leaks, or repairing breaks of any metal parts it is indispensable.

Solderall, in tubes.....25c and 50c
\$0.25 size per dozen..D.P. \$5.00
\$0.50 size per dozen..D.P. \$9.44

Red Fiber Tubing



Carried in 3-ft. lengths only

Diameter.	Thickness of Wall.		
$\frac{1}{8}$ inch	$\frac{1}{16}$ inch	Per foot.....D.P.	\$0.18
$\frac{1}{4}$ inch	$\frac{1}{16}$ inch	Per foot.....D.P.	.22
$\frac{3}{8}$ inch	$\frac{1}{8}$ inch	Per foot.....D.P.	.24
$\frac{1}{2}$ inch	$\frac{1}{8}$ inch	Per foot.....D.P.	.26
$\frac{3}{4}$ inch	$\frac{1}{8}$ inch	Per foot.....D.P.	.24
$\frac{1}{2}$ inch	$\frac{1}{4}$ inch	Per foot.....D.P.	.26
$\frac{3}{4}$ inch	$\frac{1}{4}$ inch	Per foot.....D.P.	.30

Red Fiber Rod

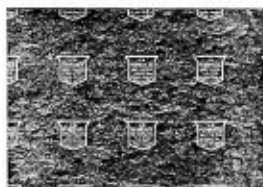


Diameter.			
$\frac{1}{8}$ inch.	Per foot.....	D.P.	\$0.24
$\frac{1}{4}$ inch.	Per foot.....	D.P.	.26
$\frac{3}{8}$ inch.	Per foot.....	D.P.	.31
$\frac{1}{2}$ inch.	Per foot.....	D.P.	.40
$\frac{3}{4}$ inch.	Per foot.....	D.P.	.62
$\frac{1}{2}$ inch.	Per foot.....	D.P.	.88
1 inch.	Per foot.....	D.P.	1.88

Red Sheet Fiber

Sheets Thickness			
1-64 inch.	Per pound.....	D.P.	\$0.44
1-32 inch.	Per pound.....	D.P.	.37
1-16 inch.	Per pound.....	D.P.	.35
$\frac{1}{8}$ inch.	Per pound.....	D.P.	.35
3-16 inch.	Per pound.....	D.P.	.40
$\frac{1}{4}$ inch.	Per pound.....	D.P.	.40
$\frac{3}{8}$ inch.	Per pound.....	D.P.	.40

J-M Permanite Sheet Packing For Gasoline Engine Cylinder Heads



J-M Permanite Sheet Packing is resilient and pliable, and makes permanent leak-proof joints without following up, even on rough or uneven surfaces. Never blows out, burns out nor squeezes out. Will stand the highest steam pressures and temperatures up to 1000 degrees F. Last at least three times as long as ordinary packings.

This packing makes much tighter joints than copper or copper-and-asbestos gaskets. Many motor troubles begin with a small leakage through inlet connections, spark plug washers, etc. J-M Permanite will eliminate these leakages completely.

Furnished in sheets 54"x63"

Permanite Sheet Packing, 1-32, per lb.....\$2.00
Per lb..D.P. \$3.33

Permanite Sheet Packing, 1-16, per lb.....2.00
Per lb..D.P. \$3.33



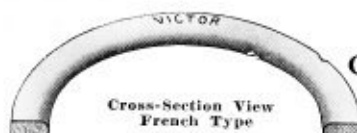
THE GIBSON COMPANY

INDIANAPOLIS



189

GASKETS



Cross-Section View
French Type

Trade No.	Diam. Inside Inches	Approx. Width of Flange	Per Doz.
201	7/8	1/4	\$0.24
Dz. D.P.	\$0.22	100..D.P.	\$1.33
202	1 1/16	1/4	.24
Dz. D.P.	.22	100..D.P.	1.33
203	1 1/8	1/4	.30
Dz. D.P.	.22	100..D.P.	1.44
204	1 1/16	1/4	.30
Dz. D.P.	.27	100..D.P.	1.56
205	1 1/8	1/4	.30
Dz. D.P.	.27	100..D.P.	1.67
206	1 3/16	1/4	.30
Dz. D.P.	.27	100..D.P.	1.67
207	1 1/4	1/4	.30
Dz. D.P.	.27	100..D.P.	1.67
208	1 5/16	1/4	.36
Dz. D.P.	.27	100..D.P.	1.67
209	1 1/2	1/4	.40
Dz. D.P.	.27	100..D.P.	2.00
210	1 7/16	1/4	.40
Dz. D.P.	.33	100..D.P.	2.22
211	1 1/2	1/4	.40
Dz. D.P.	.33	100..D.P.	2.22
212	1 9/16	1/4	.50
Dz. D.P.	.40	100..D.P.	2.44
213	1 5/8	1/4	.50
Dz. D.P.	.40	100..D.P.	2.44
214	1 11/16	1/4	.50
Dz. D.P.	.40	100..D.P.	2.55
215	1 3/4	1/4	.50
Dz. D.P.	.40	100..D.P.	2.55
216	1 13/16	1/4	.50
Dz. D.P.	.40	100..D.P.	2.55
217	1 7/8	1/4	.50
Dz. D.P.	.40	100..D.P.	2.55
218	1 15/16	1/4	.50
Dz. D.P.	.45	100..D.P.	2.67

Copper-Asbestos Round Gaskets

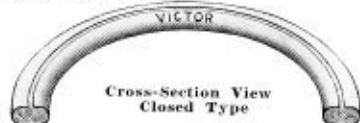
Trade No.	Diam. Inside Inches	Approx. Width of Flange	Per Doz.
219	2	5/32	\$0.50
Dz. D.P.	\$0.45	100..D.P.	\$2.67
220	2 1/16	5/32	.50
Dz. D.P.	.45	100..D.P.	2.67
221	2 1/8	5/32	.50
Dz. D.P.	.45	100..D.P.	2.78
222	2 3/16	5/32	.60
Dz. D.P.	.45	100..D.P.	3.00
223	2 1/4	5/32	.60
Dz. D.P.	.45	100..D.P.	3.10
224	2 5/16	5/32	.60
Dz. D.P.	.45	100..D.P.	3.10
225	2 3/4	5/32	.60
Dz. D.P.	.45	100..D.P.	3.22
226	2 7/16	5/32	.60
Dz. D.P.	.45	100..D.P.	3.22
227	2 1/2	5/32	.60
Dz. D.P.	.49	100..D.P.	3.33
228	2 9/16	5/32	.80
Dz. D.P.	.53	100..D.P.	3.66
229	2 3/4	5/32	.80
Dz. D.P.	.53	100..D.P.	3.66
230	2 11/16	5/32	.80
Dz. D.P.	.56	100..D.P.	3.88
231	2 5/8	5/32	.80
Dz. D.P.	.56	100..D.P.	3.88
232	2 13/16	5/32	.80
Dz. D.P.	.56	100..D.P.	3.88
233	2 3/4	5/32	.90
Dz. D.P.	.60	100..D.P.	4.10
234	2 15/16	5/32	.90
Dz. D.P.	.60	100..D.P.	4.10
235	3	3/16	.90
Dz. D.P.	.60	100..D.P.	4.10

Copper-Brass-Asbestos Gaskets

For Intake and Exhaust Pipes,
Manifolds, Carburetors, Etc.
Standard Flange Type.



Trade No.	Size Center Hole	Size Bolt Holes	Distance from Center to Center of Bolt Holes	Size Gasket Over All	Per Doz.
1	1 1/16	1 1/16	1 1/16	1 5/16 x 2 9/16	\$1.16
Dozen..D.P.	\$0.45	100..D.P.	\$3.10		
2	1 1/8	1 1/8	1 1/8	1 3/4 x 2 1/4	1.16
Dozen..D.P.	.45	100..D.P.	3.10		
3	1 1/16	1 1/16	1 1/16	1 9/16 x 2 3/8	1.16
Dozen..D.P.	.56	100..D.P.	3.55		
4	1 1/8	1 1/8	1 1/8	1 3/8 x 2 5/8	1.16
Dozen..D.P.	.56	100..D.P.	3.66		
5	1 3/16	1 3/16	1 3/16	1 11/16 x 3	1.16
Dozen..D.P.	.56	100..D.P.	3.77		
6	1 1/2	1 1/2	1 1/2	1 3/4 x 2 1/2	1.20
Dozen..D.P.	.56	100..D.P.	3.77		
7	1 5/16	1 5/16	1 5/16	1 3/8 x 3 1/4	1.20
Dozen..D.P.	.67	100..D.P.	4.00		
8	1 3/4	1 3/4	1 3/4	2 1/8 x 3 1/2	1.20
Dozen..D.P.	.67	100..D.P.	4.22		
9	1 7/16	1 7/16	1 7/16	2 1/4 x 3	1.20
Dozen..D.P.	.67	100..D.P.	4.22		
10	1 1/2	1 1/2	1 1/2	2 x 3 3/4	1.20
Dozen..D.P.	.67	100..D.P.	4.44		
11	1 9/16	1 9/16	1 9/16	2 1/4 x 3 3/4	1.50
Dozen..D.P.	.78	100..D.P.	4.88		
12	1 5/8	1 5/8	1 5/8	2 3/4 x 3 3/4	1.50
Dozen..D.P.	.78	100..D.P.	4.88		
13	1 11/16	1 11/16	1 11/16	2 5/16 x 3 3/4	1.50
Dozen..D.P.	.78	100..D.P.	5.33		
14	1 3/4	1 3/4	1 3/4	2 3/8 x 3 7/8	1.70
Dozen..D.P.	.89	100..D.P.	5.55		
15	1 15/16	1 15/16	1 15/16	2 9/16 x 4 1/4	1.70
Dozen..D.P.	.89	100..D.P.	5.77		
16	1 3/4	1 3/4	1 3/4	2 1/2 x 4	1.80
Dozen..D.P.	.89	100..D.P.	5.77		
17	1 15/16	1 15/16	1 15/16	2 1/2 x 3 7/8	1.80
Dozen..D.P.	1.11	100..D.P.	6.10		
18	2	2	2	2 13/16 x 4 1/2	2.00
Dozen..D.P.	1.11	100..D.P.	6.33		



Cross-Section View
Closed Type

Trade No.	Diam. Inside Inches	Diam. Outside Inches	Per Doz.
101	1	1 1/4	\$0.20
Dz. D.P.	\$0.22	100..D.P.	\$1.00
102	1 1/16	1 5/16	.24
Dz. D.P.	.22	100..D.P.	1.22
103	1 1/8	1 3/8	.24
Dz. D.P.	.22	100..D.P.	1.22
104	1 3/16	1 7/16	.24
Dz. D.P.	.22	100..D.P.	1.22
105	1 1/4	1 1/2	.30
Dz. D.P.	.22	100..D.P.	1.33
106	1 1/2	1 3/4	.30
Dz. D.P.	.27	100..D.P.	1.67
107	1 5/16	1 5/8	.30
Dz. D.P.	.27	100..D.P.	1.67
108	1 3/8	1 3/4	.30
Dz. D.P.	.27	100..D.P.	1.67
109	1 1/2	1 13/16	.40
Dz. D.P.	.27	100..D.P.	1.73
110	1 7/16	1 11/16	.40
Dz. D.P.	.27	100..D.P.	1.73
111	1 1/2	1 1/2	.40
Dz. D.P.	.27	100..D.P.	1.73
112	1 9/16	1 13/16	.40
Dz. D.P.	.27	100..D.P.	1.73
113	1 5/8	1 3/4	.40
Dz. D.P.	.27	100..D.P.	1.73
114	1 11/16	1 15/16	.40
Dz. D.P.	.27	100..D.P.	1.78
115	1 3/4	2	.40
Dz. D.P.	.27	100..D.P.	1.78
116	1 13/16	1 15/16	.40
Dz. D.P.	.27	100..D.P.	1.78
117	1 13/16	2 1/16	.40
Dz. D.P.	.27	100..D.P.	1.88
118	1 5/8	2 1/16	.40
Dz. D.P.	.27	100..D.P.	1.88
119	1 7/8	2 3/8	.40
Dz. D.P.	.27	100..D.P.	1.88
120	1 15/16	2 3/8	.40
Dz. D.P.	.31	100..D.P.	2.00
121	1 61/64	2 7/64	.40
Dz. D.P.	.31	100..D.P.	2.00
122	2	2 1/4	.40
Dz. D.P.	.31	100..D.P.	2.00

Trade No.	Diam. Inside Inches	Diam. Outside Inches	Per Doz.
123	2 1/16	2 3/4	\$0.40
Dz. D.P.	\$0.31	100..D.P.	\$2.00
124	2 1/16	2 5/16	.40
Dz. D.P.	.33	100..D.P.	2.10
125	2 5/16	2 5/8	.40
Dz. D.P.	.33	100..D.P.	2.10
126	2 3/8	2 7/8	.50
Dz. D.P.	.33	100..D.P.	2.22
127	2 3/8	2 9/8	.50
Dz. D.P.	.33	100..D.P.	2.22
128	2 1/2	2 3/4	.50
Dz. D.P.	.33	100..D.P.	2.33
129	2 3/16	2 7/16	.50
Dz. D.P.	.33	100..D.P.	2.33
130	2 1/4	2 7/16	.50
Dz. D.P.	.33	100..D.P.	2.33
131	2 1/4	2 7/8	.50
Dz. D.P.	.33	100..D.P.	2.33
132	2 9/32	2 17/32	.50
Dz. D.P.	.33	100..D.P.	2.44
133	2 3/8	2 3/4	.50
Dz. D.P.	.33	100..D.P.	2.44
134	2 13/32	2 19/32	.50
Dz. D.P.	.33	100..D.P.	2.44
135	2 7/16	2 11/16	.50
Dz. D.P.	.33	100..D.P.	2.44
136	2 1/2	2 3/4	.50
Dz. D.P.	.40	100..D.P.	2.55
137	2 1/2	2 3/4	.60
Dz. D.P.	.40	100..D.P.	2.55
138	2 17/32	2 3/4	.60
Dz. D.P.	.40	100..D.P.	2.67
139	2 3/8	3	.60
Dz. D.P.	.45	100..D.P.	2.78
140	2 13/16	3 1/16	.60
Dz. D.P.	.45	100..D.P.	2.88
141	2 3/4	3 1/4	.70
Dz. D.P.	.45	100..D.P.	3.00
142	2 3/4	3 1/4	.70
Dz. D.P.	.45	100..D.P.	3.00
143	2 15/16	3 1/16	.70
Dz. D.P.	.45	100..D.P.	3.00
144	3	3 3/4	.70
Dz. D.P.	.45	100..D.P.	3.10

Copper-Asbestos Special Threaded Gaskets for Spark Plugs



Trade No.	Diameter Inside Inches	Diameter Outside Inches	Type of Gaskets	Per Doz.
1138a	7/8	1 1/8	Closed	\$0.20
Dozen..D.P.	\$0.22	100..D.P.	\$0.89	
1138	1 1/8	1 3/8	Closed	.20
1/8 Plug.....	27/32	1 3/32	Closed	.20
Dozen..D.P.	.22	100..D.P.	.89	
1137	23/32	63/64	Closed	.20
Dozen..D.P.	.22	100..D.P.	.89	
1138	1 1/8	1 3/8	Closed	.20
Dozen..D.P.	.22	100..D.P.	.89	
1139	1 1/8	1 3/8	French	.20
Dozen..D.P.	.22	100..D.P.	.89	
1140	1 1/8	1 3/8	Closed	.20
Dozen..D.P.	.22	100..D.P.	.89	



Special Gaskets for Intake and Exhaust Pipe

Center Flange Type

Trade No.	Diameter Inside Inches	Diameter Outside Inches	Height of Flange Over All	Gasket for Size of Pipe	Per Doz.
328	1 1/8	1 1/8	3/16	1 1/8	\$1.50
Dozen..D.P.	\$0.78	100..D.P.	\$4.66		
329	1 1/2	1 1/2	3/16	1 1/2	2.00
Dozen..D.P.	.89	100..D.P.	6.10		
330	1 3/4	1 3/4	3/16	1 3/4	2.50
Dozen..D.P.	1.00	100..D.P.	7.77		
331	1 5/8	1 5/8	5/16	1 5/8	3.00
Dozen..D.P.	1.11	100..D.P.	8.33		
332	1 3/4	1 3/4	5/16	1 3/4	20.00
Dozen..D.P.	8.88	100..D.P.	59.94		



GASKETS

Victor Ford Gaskets



This Box Contains 12 Cylinder Head Gaskets

- No. J. V. 29. Box of 12 Ford Cylinder Head Gaskets, per box.....\$9.60
 Per Box....D.P. \$6.66
 Less than box lot, each....D.P. \$0.66

Victor Ford Gaskets



This Box Contains 12 Complete Sets Less the Cylinder Head Gasket

- No. J. V. 9. Box of 12 Set Ford Gaskets. Less Cylinder Head Gaskets, per box.....\$3.20
 Per Box....D.P. \$3.32

Victor Ford Gaskets



- No. J. V. 25. Box of 12 Complete Sets Ford Gaskets, per box.....\$12.00
 Per Box....D.P. \$8.88
 Less than box, per set....D.P. \$0.88

Victor Buick Gaskets



This box contains 300 Copper Asbestos and Copper Brass Asbestos Gaskets that will fit all models of Buick cars made during the years of 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913 and 1914.

The assortment consists of:

Gasoline Tank Filler.....	Gaskets
Intake and Exhaust Pipe.....	Gaskets
Spark Plug.....	Gaskets
Exhaust Pipe.....	Gaskets
Valve Cap.....	Gaskets
Water Outlet.....	Gaskets
Water Inlet.....	Gaskets
Water Flange.....	Gaskets
Intake Elbow.....	Gaskets
Bolt size $\frac{1}{2}$	Gaskets
Bolt Size $\frac{3}{8}$	Gaskets
Bolt Size $\frac{1}{4}$	Gaskets
Total number of different sizes.....	20
Total quantity of all gaskets.....	300

- No. J. V. 42. Box of 300 Assorted Buick Gaskets, per box.....\$10.00
 Per Box....D.P. \$11.10

Assorted Victor Motorcycle Gaskets



This box contains 170 Copper Asbestos Gaskets that will fit all models of the Indian as well as every other make of motorcycle now on the market.

The assortment consists of the following:

French Type		Closed Type	
Sizes from $1\frac{1}{2}$ to $3\frac{1}{2}$	16	Sizes from $\frac{1}{2}$ to $1\frac{1}{2}$	8
Quantity of Gaskets.....	62	Quantity of Gaskets.....	101
Solid Copper			
Sizes of Copper Gaskets.....	2		
Quantity of Gaskets.....	7		
Total number of sizes.....	26		
Total quantity of gaskets.....	170		

The above range of sizes and numbers of gaskets enables one to pick a gasket instantly for every day repairs. Dealers and repairmen will therefore find this assortment an absolute necessity.

- No. J. V. 21. Box of 170 Assorted Motorcycle Gaskets, per box.....\$6.00
 Per Box....D.P. \$6.66



GASKETS

Assorted Victor Standard French Type Round Gaskets



This box contains 100 assorted Victor Copper Asbestos French Type Gaskets, selected from among the most popular sizes exclusively used by all repairmen and garages, and are selected in proper proportion to accommodate every-day repairs on all makes of automobile motors.

No. J.V. 24 Box of 100 Assorted French Type Gaskets, per box.....\$4.75
Per box.....D.P. \$5.00

Assorted Victor Standard Closed Type Round Gaskets



This box contains 200 assorted Victor Copper Asbestos Gaskets, selected from among the most popular sizes universally used, and in proper proportion for every-day repairs on all makes of automobile motors from the highest to the lowest priced car and are fully guaranteed by the manufacturer.

To make the assortment more complete sixty-five selective sizes of plug gaskets are included to fit all makes of spark plugs on the market.

No. J.V. 22 Box of 200 Assorted Closed Type Round Gaskets, per box.....\$5.00
Per box.....D.P. \$5.00

Assorted Victor Standard Gaskets



For Intake and Exhaust Pipes, Manifolds, Carburetors, Etc.

This box contains 50 assorted Victor Copper Brass Asbestos Gaskets, universally recognized as the most economical and efficient gaskets made for intake and exhaust pipes, inlet and exhaust manifolds, exhaust pipe flanges, carburetor connections, etc.

No. J.V. 23 Box of 50 Assorted Exhaust Gaskets, per box.....\$4.75
Per box.....D.P. \$5.00

G.Q. Closed Type Assortment



No. 1 G.Q. Gasket Assortment, consisting of a highly finished and decorated board with hooks on which are placed 32 sizes closed type gaskets, one dozen of each size, from small spark plug gaskets increasing in sixteenths up to 2 1/2 inside diameter.

EachD.P. \$14.44

G.Q. Open or French Type Assortment



No. 2 G.Q. Gasket Assortment, consisting of a highly finished and decorated board with hooks on which are placed 32 sizes French Type Gaskets, one dozen of each size, from small spark plug gaskets increasing in sixteenths up to 2 1/2 inside diameter.

EachD.P. \$14.44

These G.Q. Display Boards provide the best method yet devised for handling gaskets.



BELTING, BELT LACING AND SPRINGS

Alligator Steel Belt Lacing



Patented in United States, Nov. 2, 1909.

Patented in Great Britain, Aug. 24, 1909, No. 19515.

Saves time, saves labor. No tools required but a hammer.

It is adapted for use on leather, rubber, balata, cotton or canvas stitched belting. A separable lacing, hinging on a rawhide or sectional steel rocker pin.

No. 15 Alligator Steel Lacing for belts, $\frac{1}{8}$ to $\frac{5}{32}$ inch thick. For light single leather belting one to two inches wide, packed in 8-inch lengths, in boxes containing sufficient for 64 inches in width of belting, complete with gauge pin for applying and 64 inches rawhide hinge pins.

Weight $\frac{1}{2}$ lb., price.....\$1.00
Per box.....D.P. \$1.66

No. 25 Alligator Steel Lacing for belts $\frac{3}{8}$ to $\frac{7}{32}$ inch thick. For medium and heavy single leather, 3-ply rubber or 4-ply cotton or balata or any make of belting $\frac{3}{8}$ to $\frac{7}{32}$ inch thick. Packed in boxes complete with gauge pin and either rawhide or rocker hinge pins, as follows:

Box F contains sufficient for 48 inches in width of belting in 8-inch lengths.

Weight $1\frac{1}{2}$ lbs., price.....\$1.00
Per box.....D.P. \$1.66

Box G contains sufficient for 96 inches in width of belting in 12-inch lengths.

Weight $2\frac{1}{2}$ lbs., price.....\$2.00
Per box.....D.P. \$3.32

No. 27 Alligator Steel Lacing for belts $\frac{1}{4}$ to $\frac{9}{32}$ inch thick. Specially adapted for motorcycle belts.

Packed in boxes containing sufficient for 96 inches in width of belting in 12-inch lengths, per box..\$2.25
Per box.....D.P. \$3.75

Improved Belt Hooks



For round or flat belt. (Illustration 2/3 actual size.)

When bent and clamped into the belt they correspond to the size of the belt.

Price per dozen.....D.P. \$0.22

Belt Lacing



$\frac{1}{2}$ -inch Rawhide, per 100 feet.....D.P. \$3.32

One hundred feet in a bundle.

Leather Beltings and Couplings



Tannate Round Leather Belting, $\frac{1}{8}$ in., per ft.....	D.P. \$0.12
Tannate Round Leather Belting, $\frac{5}{16}$ in., per ft.....	D.P. .19
Tannate Round Leather Belting, $\frac{3}{8}$ in., per ft.....	D.P. .28
Tannate Round Leather Belting, $\frac{7}{16}$ in., per ft.....	D.P. .36
Tannate Round Leather Belting, $\frac{1}{2}$ in., per ft.....	D.P. .42
Oak-tanned Flat Leather Belting, $\frac{1}{8}$ in., per ft.....	D.P. .15
Oak-tanned Flat Leather Belting, $\frac{1}{4}$ in., per ft.....	D.P. .22
Oak-tanned Flat Leather Belting, $\frac{1}{2}$ in., per ft.....	D.P. .36
Round Steel Belt Couplings, $\frac{1}{8}$ in., per pair.....	D.P. .22
Round Steel Belt Couplings, $\frac{5}{16}$ in., per pair.....	D.P. .26
Round Steel Belt Couplings, $\frac{3}{8}$ in., per pair.....	D.P. .32
Round Steel Belt Couplings, $\frac{7}{16}$ in., per pair.....	D.P. .44
Round Steel Belt Couplings, $\frac{1}{2}$ in., per pair.....	D.P. .48

Calcutt's Steel Wire Belting



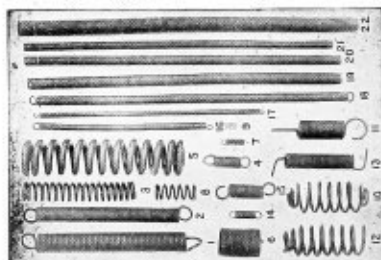
Wire Belt
Patent Pending



Hook and Eye Wire Coupling

Wire Belting, 50 feet and 20 couplings in box, $\frac{1}{8}$ inch, per box.....	D.P. \$3.75
Wire Belting, 50 feet and 20 couplings in box, $\frac{5}{16}$ inch, per box.....	D.P. 4.18
Wire Belting, 50 feet and 20 couplings in box, $\frac{3}{8}$ inch, per box.....	D.P. 4.58
Couplings for wire belting, any size, put up in packages of 25, per package.....	D.P. 1.11

Springs, Oil Tempered



No.	Length Overall	Diameter	Gauge Wire	Price Per Doz. D.P.
1	$5\frac{1}{2}$ in.	$\frac{3}{8}$ in.	11	\$0.77
2	5 in.	$\frac{1}{2}$ in.	17	.62
3	$3\frac{1}{2}$ in.	$\frac{3}{8}$ in.	11	.44
4	$1\frac{1}{2}$ in.	$\frac{3}{8}$ in.	16	.22
5	$4\frac{1}{2}$ in.	$1\frac{1}{2}$ in.	4	1.10
6	$1\frac{1}{2}$ in.	1 in.	12	.44
8	$1\frac{1}{2}$ in.	$\frac{1}{2}$ in.	14	.33
10	$2\frac{1}{2}$ in.	1 in.	11	.62
11	3 in.	$\frac{3}{8}$ in.	11	.62
12	$2\frac{1}{2}$ in.	1 in.	9	.55
14	$1\frac{1}{2}$ in.	$\frac{1}{2}$ in.	20	.27
15	2 in.	$\frac{1}{8}$ in.	13	.54
16	6 in.	$\frac{1}{2}$ in.	21	.62
18	$10\frac{1}{2}$ in.	$\frac{1}{8}$ in.	18	1.06
19	10 in.	$\frac{3}{8}$ in.	15	1.11
20	10 in.	$\frac{1}{8}$ in.	16	1.11
22	11 in.	$\frac{1}{2}$ in.	14	1.55

Box of 25 Assorted Oil Tempered Springs, per box.....D.P. \$0.88



TIRE COVERS AND TENTS



Gibson Quality Drill Tire Cover

A thoroughly well made cover in the construction of which the best quality black enamel drill is used. Supplied in sizes from 28x3" to 37x5". In ordering specify size desired.

- No. 950 Gibson Quality Drill Tire Covers, Ford sizes, 30x3 or 30x3½, each.....\$1.50
Each..D.P. \$1.55 Dozen..D.P. \$17.33
- No. 951 Gibson Quality Drill Tire Covers, sizes 32x3½ to 37x5, each.....1.75
Each..D.P. \$2.00 Dozen..D.P. \$22.22
- No. 960 Gibson Quality Drill Tire Covers for demountable rims, Ford size, 30x3½, each.....1.75
Each..D.P. \$2.00 Dozen..D.P. \$22.22
- No. 961 Gibson Quality Drill Tire Covers for demountable rims, sizes 32x3½ to 36x4½, each.....2.00
Each..D.P. \$2.00 Dozen..D.P. \$22.22

Gibson Quality Duck Tire Covers

Made of heavy black enamel duck and will fit all makes of tires regardless of style of tread. Can be easily and quickly applied without injury to one's fingers. Buttons inside and is held to a close fit by the flat steel spring that runs close to the edge around the entire circumference of the cover.

- No. 970 Gibson Quality Duck Tire Covers, Ford sizes, 30x3 and 30x3½, each.....\$1.65
Each..D.P. \$2.22 Dozen..D.P. \$24.00
- No. 971 Gibson Quality Duck Tire Covers, sizes 32x3½ to 37x5½, each.....1.75
Each..D.P. \$2.44 Dozen..D.P. \$26.66
- No. 980 Gibson Quality Duck Demountable Tire Covers, Ford size, 30x3½, each.....1.90
Each..D.P. \$2.44 Dozen..D.P. \$26.66
- No. 981 Gibson Quality Duck Demountable Tire Covers, sizes 32x3½ to 37x5½, each.....2.00
Each..D.P. \$2.44 Dozen..D.P. \$26.66



Spiral Spring Tire Covers

This is an adjustable one-piece tire cover held in position by two endless spiral springs, and slips on smooth and perfect fitting, without the use of any other fastening device. Made of best quality black enamel duck.

- No. 1296 Spiral Spring Tire Covers to fit tires not on demountable rims—
- | | | | |
|-------|----------------------|---------|----------------------|
| 28-30 | Each.....D.P. \$2.15 | 35-36 | Each.....D.P. \$2.82 |
| 31-32 | Each.....D.P. 2.42 | 37-38 | Each.....D.P. 3.04 |
| 33-34 | Each.....D.P. 2.58 | Over 38 | Each.....D.P. 3.70 |
- No. 1292 Spiral Spring Tire Covers to fit tires on demountable rims—
- | | | | |
|-------|--------------------|---------|--------------------|
| 28-30 | Each.....D.P. 2.15 | 35-36 | Each.....D.P. 2.82 |
| 31-32 | Each.....D.P. 2.42 | 37-38 | Each.....D.P. 3.04 |
| 33-34 | Each.....D.P. 2.58 | Over 38 | Each.....D.P. 3.70 |

Nesom Folding Outing Tent



For Tourists and Out-Door Sleeping

This is the only combined tent and bed on the market. Its unusual popularity is easily explained: there is nothing similarly constructed. It is always ready for service; it can be used any place, suspended from a tree limb, a porch studding, or hung from its tripod. There is no setting of poles, driving of tent pegs and tightening of guy ropes.

The bed, which is 6 feet 6 inches by 3 feet 2 inches, will accommodate two persons of ordinary size with perfect comfort. The flaps are fitted with glove fasteners, and can be closed from the inside, thereby affording protection from the elements. In extremely hot weather the flaps can be thrown back and mosquito netting placed in the opening. When swung from the tripod the bed is two feet from the ground, insuring safety from snakes, insects and dampness, which are the bane of the camper who sleeps on the ground.

A clever patent hinge permits the tent, including tripods, to fold into a neat, compact bundle 2 ft. 8 in. by 6 in., weighing about 20 pounds.

The compactness of this tent when folded and the ease with which it can be arranged for sleeping has made it a popular feature in the equipment of the automobile tourist. It is solid comfort for home and camp life.

- Standard Size, 6 ft. 6 in. by 3 ft. 2 in., complete..\$17.50
Each..D.P. \$31.11
- Without Tripod 15.00
Each..D.P. \$26.66
- Extra Large Size, 7 ft. by 3 ft. 6 in. 21.50
Each..D.P. \$38.22
- Without Tripod 19.00
Each..D.P. \$33.77



CLEANING ACCESSORIES

Chamois Skins



No. 1. Chamois Skins, 11x13 1/2, each.....	\$0.25
Each...D.P. \$0.33	
Per Kip of 30 Skins...D.P. \$9.33	
No. 2. Chamois Skins, 19x25, each.....	.75
Each...D.P. \$1.11	
Per Kip of 30 Skins...D.P. \$30.00	
No. 3. Chamois Skins, extra large, each.....	1.25
Each...D.P. \$2.22	
Per Kip of 30 Skins...D.P. \$60.00	

Sponges

Genuine Rock Island sheep's wool full form Sponges, clean.

No. 10 Sponge, 2-oz., each.....	\$0.75
Each...D.P. \$1.33	
No. 20 Sponge, 4-oz., each.....	1.25
Each...D.P. \$2.44	

To meet the demand for a lower-priced sponge, we have a cheaper grade in yellow cuts.

No. 30 Sponge, 2-oz., each.....	\$0.25
Each...D.P. \$0.40	
No. 40 Sponge, 4-oz., each.....	.50
Each...D.P. \$0.88	

Carriage Feather Dusters

These dusters contain 120 selected tail feathers wound on hard wood blocks, threads guaranteed not to strip and trimmed with short leatherette cuffs. They are very durable and the best low-priced duster that can be safely used on autos.



Carriage Feather Duster, 14-inch, each.....	\$1.00
Each...D.P. \$1.44	
Dozen...D.P. \$15.55	
Carriage Feather Duster, 16-inch, each.....	1.50
Each...D.P. \$1.77	
Dozen...D.P. \$20.00	

Chicago Feather Dusters



Chicago Feather Dusters are made for hard service and are unequalled in wearing qualities and appearance.

No. 45 Feather Duster, 14-inch, each.....	\$1.75
Each...D.P. \$2.55	
Dozen...D.P. \$28.00	
No. 46 Feather Duster, 16-inch, each.....	2.00
Each...D.P. \$3.00	
Dozen...D.P. \$35.33	

Wool Dusters



Made of strong, staple imported wool only, well filled and full length. Dyed in fast, bright colors. Handles are hardwood, enameled a hard, bright color.

No. 2 Wool Dusters, 8-inch, each.....	\$0.45
Each...D.P. \$0.66	
Dozen...D.P. \$7.22	
No. 6 Wool Dusters, 10-inch, each.....	1.00
Each...D.P. \$1.33	
Dozen...D.P. \$14.44	

"Royal Blue" Wool Dusters

There is a strong demand for a wool duster, for use on cars, stronger and heavier than the common wool dusters. "Royal Blues" are made to supply this demand. A "Royal Blue" will outwear two ordinary wool dusters because they are well filled with strong staple wool, which is held in place by reinforced cuffs. The head into which the handle screws has an unbreakable metal base. The handles are hardwood, "rubberoid" finish, and the threads guaranteed not to strip.



Washable in gasoline or soap and water.

A Royal Blue Wool Dusters, each.....	\$1.00
Each...D.P. \$1.33	
Dozen...D.P. \$14.44	
B Royal Blue Wool Dusters, each.....	1.25
Each...D.P. \$1.66	
Dozen...D.P. \$18.66	
C Royal Blue Wool Dusters, each.....	1.50
Each...D.P. \$2.11	
Dozen...D.P. \$23.33	
D Royal Blue Wool Dusters, each.....	1.75
Each...D.P. \$2.55	
Dozen...D.P. \$28.00	

Packed one dozen in a carton.

"Round Downs" Dust-Absorbing—For Body Wiping



"Round Downs" are a cylindrical shaped feather duster, made of down (marabou) feathers wound around a handle. Down feathers have small stems and thick, soft, silky plumage. A sufficient quantity of downs are used to produce a thick, soft, fur-like surface, which picks up and retains dust particles until shaken or washed out.

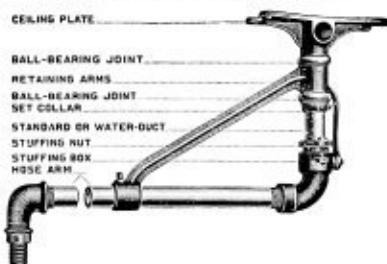
For wiping bodies they are the ideal duster. They are soft as silk and won't scratch the finest finished car. They absorb the dust instead of scattering it and have a large dust-absorbing capacity because of their round shape and thick, soft texture. May be washed or shaken clean when filled with dust.

No. 18 Round Down, length of handles 14 inches, length of down face 6 1/2 inches, each.....	\$1.50
Each...D.P. \$1.66	
Dozen...D.P. \$18.66	
No. 19 Round Down, length of handles 16 inches, length of down face 8 inches, each.....	1.75
Each...D.P. \$2.40	
Dozen...D.P. \$21.66	



WASHERS AND SOAP

Perfection Buggy Washer



Keeps the hose dry; prevents its wearing out, kinking or breaking; works easily and smoothly and is a great labor saver, because you never have to move the vehicle while washing it. A necessity in all garages, clubs and auto stations.

Price\$10.00
Each..D.P. \$17.77

Sleeve and Cuff Protectors



Sleeve Protectors made of rubber cloth, per pair\$0.75
Per Pair..D.P. \$0.88



Aprons

No. 159. Special Heavy Oiled Duck Wash Aprons.
Guaranteed, each.....\$3.25
Each..D.P. \$4.11

Rubber Boots



These boots are made of the best rubber and duck possible to get, have a very heavy sole; also properly reinforced so as to stand very hard usage.

Price, regular style with rubber soles, per pair..\$6.80
Per Pair..D.P. \$10.00

Buckeye Soap



Buckeye Cleanser is put up in six different size packages, as follows:

Barrels450 to 500 pounds net
Half barrels225 pounds net
Kegs125 pounds net
25-pound pails..... 2 pails per crate
10-pound pails..... 6 pails per case
5-pound pails.....12 pails per case

Buckeye Cleanser in 5-lb. pails, each.....\$0.75
Dozen..D.P. \$13.33

Buckeye Cleanser in 10-lb. pails, each..... 1.50
Dozen..D.P. \$26.66

Buckeye Cleanser in 25-lb. pails, each..... 3.00
Dozen..D.P. \$60.00

Buckeye Cleanser in kegs, per lb......12
Per lb..D.P. \$0.18

Buckeye Cleanser in half barrels, per lb......12
Per lb..D.P. \$0.18

Buckeye Cleanser in barrels, per lb......10
Per lb..D.P. \$0.15

Whiz Hand Soap

When Whiz and dirt meet there is something doing. The dirt flies. Used by painters, printers, machinists, engineers, chauffeurs, mechanics, and all those whose work causes soiling of the hands. Lathers freely in hard water.

Whiz Hand Soap in 1-lb. cans,
each\$0.10
Per Dozen..D.P. \$2.00



Blue Ribbon Hand Soap



Blue Ribbon Cold Cream Hand Soap washes the hands without water. Leaves the hands soft and smooth. Just the thing for motorists on the road after tinkering with tires or engine. No grit, no water, soft as velvet, no chapped hands.

10-oz. can, per can...\$0.10
Per Dozen..D.P. \$1.77

2-lb. can, per can... .25
Per Dozen..D.P. \$4.44

6-lb. can, per can... .60
Per Dozen..D.P. \$8.88



Gibson Quality Combination Metal Polish



EVERY MOTORIST and garage man has experienced the annoyance and difficulty incidental to the use of several metal polishes when polishing a car. Heretofore it has been necessary to use different polishes for brass, nickel and copper. The Gibson Quality Combination Metal Polish is the result of much experimentation and test. It meets that ever present demand for a polish that will work equally well

on all metals. It is just as efficient on nickel as it is on brass or copper. In fact it will polish any metal having a bright surface. This Polish will resist the action of rain and snow and will give a wonderful luster with very little effort. Its composition insures against chemical reaction and the eating of the plating from the metals polished, as is often the case where inferior polishes are used.

This Metal Polish is packed in convenient form:
Pints, Quarts, Half-gallons and Gallons.

PRICES

Gibson Quality Combination Metal Polish,
pints, each \$0.25
Packed 24 in case. Per doz. D.P. \$4.41

Gibson Quality Combination Metal Polish,
quarts, each40
Packed 24 in case. Per doz. D.P. \$8.30

Gibson Quality Combination Metal Polish,
half-gallons, each70
Packed 12 in case. Per doz. D.P. \$12.20

Gibson Quality Combination Metal Polish,
gallons, each 1.20
Packed 6 in case. Per doz. D.P. \$20.00





BODY AND METAL POLISH

This is a heavy polish, especially adapted for use on articles exposed to the weather. It is not a varnish, but a cleaner and renewer of the original finish. Contains no acid, alkali or grit, which destroys the finish. Does not gum, stick or leave a greasy surface to catch dust and soil the clothing. Leaves the surface perfectly dry. Preserves the luster and prevents checking.

Golden Star Body Polish , $\frac{1}{2}$ pint, each.....	\$0.25
Doz.....D.P. \$4.44	
Golden Star Body Polish , $\frac{1}{2}$ pint, each.....	.50
Doz.....D.P. \$8.88	
Golden Star Body Polish , pint, each.....	.75
Doz.....D.P. \$12.22	
Golden Star Body Polish , quart, each.....	\$1.00
Doz.....D.P. \$17.77	
Golden Star Body Polish , $\frac{1}{2}$ gallon, each.....	1.75
Doz.....D.P. \$26.66	
Golden Star Body Polish , gallon, each.....	3.00
Doz.....D.P. \$53.33	

Mat's Body Polish

This polish is equally good as a body polish or leather dressing. It is used for renovating upholstery and tops, as well as brightening varnished surfaces.

Mat's Body Polish , pint, each.....	\$0.50
Doz.....D.P. \$6.66	
Mat's Body Polish , quart, each.....	1.00
Doz.....D.P. \$13.32	
Mat's Body Polish , $\frac{1}{2}$ gallon, each.....	1.50
Doz.....D.P. \$21.11	
Mat's Body Polish , gallon, each.....	2.50
Doz.....D.P. \$40.00	

Glad Rags



Glad Rags , each.....	\$0.25
Dozen.....D.P. \$3.33	

Golden Star Body Polish



Blue Ribbon Metal Polish

For Brass Only



A lasting shine in every drop. The quick action of Blue Ribbon Metal Polish attracts immediate attention. Its economy in use and absolute freedom from injurious ingredients secures permanent friends.

Blue Ribbon Metal Polish , $\frac{1}{2}$ pint, each.....	\$0.15
Doz.....D.P. \$2.66	
Blue Ribbon Metal Polish , pint, each.....	.25
Doz.....D.P. \$4.44	
Blue Ribbon Metal Polish , quart, each.....	.40
Doz.....D.P. \$8.00	
Blue Ribbon Metal Polish , $\frac{1}{2}$ gallon, each.....	.75
Doz.....D.P. \$13.32	
Blue Ribbon Metal Polish , gallon, each.....	1.25
Doz.....D.P. \$22.22	
Case Lots, Doz.....D.P. \$20.00	

Cases Blue Ribbon Polish Contain:

3 Dozen $\frac{1}{2}$ Pints	1 Dozen $\frac{1}{2}$ Gallons
2 Dozen Pints	$\frac{1}{2}$ Dozen Gallons
2 Dozen Quarts	

Blue Ribbon Nickel Polish

For Nickel Only

The ordinary metal polish manufacturer is experimenting on a new nickel polish, while we are giving you a Quality Nickel Polish which has already stood the test.



Blue Ribbon Nickel Polish , $\frac{1}{2}$ pint can, each.....	\$0.25
Doz.....D.P. \$3.33	
Case Lots, Doz.....D.P. \$3.00	
Blue Ribbon Nickel Polish , pint can, each.....	.50
Doz.....D.P. \$6.11	
Case Lots, Doz.....D.P. \$5.55	
Blue Ribbon Nickel Polish , quart can, each.....	.75
Doz.....D.P. \$10.00	
Case Lots, Doz.....D.P. \$8.88	

Blue Ribbon Auto Body Gloss and Furniture Polish

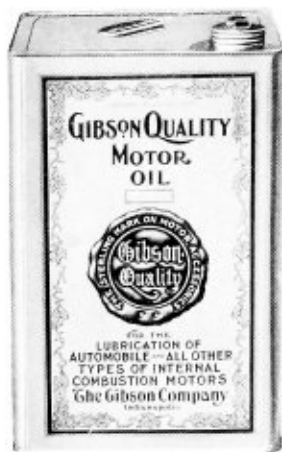
Is not an ordinary lacquer or veneer which simply produces an artificial luster and lasts scarcely longer than the time used in applying it.



Blue Ribbon Body Polish , 6 ounces, each.....	\$0.25
Doz.....D.P. \$4.00	
Case Lots, Doz.....D.P. \$3.55	
Blue Ribbon Body Polish , pint, each.....	.50
Doz.....D.P. \$8.88	
Case Lots, Doz.....D.P. \$8.00	
Blue Ribbon Body Polish , quart, each.....	1.00
Doz.....D.P. \$16.00	
Case Lots, Doz.....D.P. \$14.44	
Blue Ribbon Body Polish , $\frac{1}{2}$ gallon, each.....	1.75
Doz.....D.P. \$28.00	
Case Lots, Doz.....D.P. \$25.22	
Blue Ribbon Body Polish , gallon, each.....	2.50
Doz.....D.P. \$48.00	
Case Lots, Doz.....D.P. \$43.00	



Gibson Quality Motor Oil



ONE OF THE MOST serious problems confronting the motorist is the use of a satisfactory lubricant for his automobile. The remarkable growth of the automobile industry and the natural large demand for oils and greases has flooded the market with hundreds of good, bad and indifferent lubricants, some of which do the motor and other machinery more harm than good. The automobile motor, with the variable conditions of heat and cold, expansion and contraction, friction and terrific speed under which it must operate, demands exceptional care in the selection of an oil that will lubricate all the bearings liberally without waste; that will flow freely at low temperatures without coagulation; that will retain its viscosity (body) at high temperatures and will not carbonize the cylinders. Such an oil must have these qualities:

High Flash Test—The flash point is the lowest temperature at which the vapors arising from the oil will ignite. Oils used for the lubrication of internal combustion engines are exposed to severe heat. The flash test shows, therefore, never fall below 375 degrees. Gibson Quality Oil shows a flash test of 390 degrees.

High Fire Test—The fire point of an oil is the lowest temperature at which the oil itself ignites. Since the fire is always above the flash in temperature, the test should show not less than 430 degrees. Gibson Quality Oil shows a fire test of 445 degrees.

Cold Test—The cold test is the lowest temperature at which an oil will flow or pour. This is very essential, as motor oil should be fluid even at temperatures as low as 10 degrees. Gibson Quality Motor Oil shows a cold test of 8 degrees F.

Viscosity—This represents the body of the oil and determines its lubricating value. The viscosity is measured by the fluidity at certain temperatures. Gibson Quality Oil shows a viscosity of 220 at 100 degrees.

All the elements described above are found in high values in the Gibson Quality Motor Oil—an oil that has been subjected to every known test by the engineers of the largest automobile factories in America. This Gibson Quality Motor Oil is better adapted to automobile motors than any oil manufactured. It possesses those factors that guarantee the motorist—

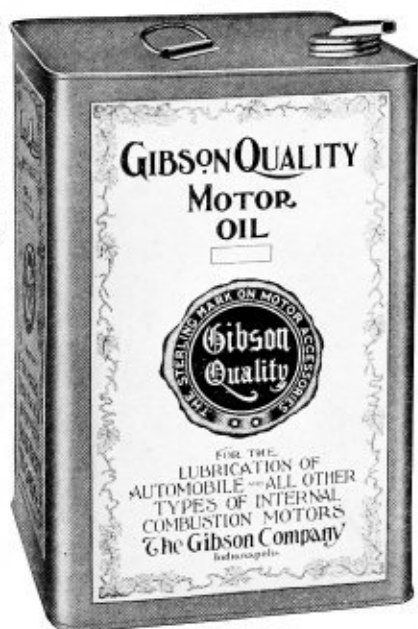
- Greatest mileage per gallon.
- Least bearing wear per mile.
- Least carbon.
- Best general results.
- Least friction and consequently less fuel.

An oil that is made for the varying conditions found in automobile motors and guaranteed to give perfect satisfaction.

Dealers—We have a special sales proposition on this line of oils and greases. Write for it at once. It will pay you.



Gibson Quality Motor Oil and Greases



Gibson Quality Motor Oil

The Gibson Quality Motor Oil is packed in lithographed cans of special design, with patented spout. These packages make it very convenient for handling and guard against loss in pouring.

Prices—Light, Heavy and Medium Grades

1-Gallon Can	\$0.75
1-gallon cans, packed six cans to case, per case....D.P. \$6.10	
5-Gallon Can	3.50
5-gallon can, packed one can to case, per case....D.P. \$4.44	
1/2-Barrel Lots, per gallon .....	.38
Per gallon....D.P. \$0.69	
Barrel Lots, per gallon .....	.36
Per gallon....D.P. \$0.65	

Gibson Quality Motor Grease

Gibson Quality Motor Grease is of the right consistency to give the very best results in grease cups, transmissions and at all other points where a high-grade grease is necessary. This grease is guaranteed not to harden or cake. It is an ideal lubricant.

1-Pound Cans	\$0.20
Packed 24 1-pound cans to case, per case....D.P. \$6.66	
5-Pound Cans .....	.90
Packed 6 5-pound cans to case, per case....D.P. \$6.10	
10-Pound Cans	1.50
Packed 6 10-pound cans to case, per case....D.P. \$11.10	
25-Pound Can	3.00
Packed 1 25-pound can to case, per case....D.P. \$4.44	
Half-Barrels, per pound .....	.10
Per pound....D.P. \$0.11	
Barrels, per pound .....	.09
Per pound....D.P. \$0.11	

Gibson Quality Heavy Transmission Oil

Some motorists and garage men prefer a heavy fluid oil for transmissions, and for this purpose we offer the Gibson Quality Heavy Transmission Oil as being the very best in this class of lubricants.

5-Gallon Cans	\$2.00
5-Gallon Can....D.P. \$3.33	
Half-Barrels, per gallon .....	.45
Half-Barrels, per gallon....D.P. \$0.58	
Barrels, per gallon .....	.42
Barrels, per gallon....D.P. \$0.53	



COLOR VARNISHES AND OILS

Berry Brothers' Varnishes



We offer in this line of color varnishes the most perfect product as to working, flowing and wearing qualities. The use of these goods makes possible the elimination, either entirely or in part, of the flat color coats, depending on the character of the work. The varnish used is especially made for this particular line and the colors are of the best. These goods cover solid, dry hard so as to rub in twenty-four hours, with the least amount of labor. They do not liver up or harden and can be used on the finest kind of carriage and automobile work.

	Per Qt. Can
Auto Color Varnish, Light Gray.....	\$1.00
Each...D.P. \$1.55	
Auto Color Varnish, Yellow.....	1.00
Each...D.P. \$1.55	
Auto Color Varnish, Rich Vermilion.....	1.25
Each...D.P. \$1.88	
Auto Color Varnish, Auto Red.....	1.25
Each...D.P. \$1.88	
Auto Color Varnish, Rose Color.....	1.25
Each...D.P. \$1.88	



Auto Color Varnish, Wine Color.....	1.00
Each...D.P. \$1.55	
Auto Color Varnish, Carmine	1.25
Each...D.P. \$1.88	
Auto Color Varnish, Auto Blue.....	1.00
Each...D.P. \$1.55	
Auto Color Varnish, Brew- ster Green.....	1.00
Each...D.P. \$1.55	
Auto Color Varnish, Jet Black.....	1.00
Each...D.P. \$1.55	

Graphcoat

For use on rims, springs, pipe and bolt threads, and wherever a coating of graphite is desirable.

Graphcoat is a combination of very fine Acheson Graphite and a fluid carrier of a volatile quick-drying nature. It is a most desirable mixture for use on automobile rims where a coating of graphite serves to assist in the speedy removal of tires, and on springs to prevent squeaking. There are many other places where it will be found very valuable, particularly on bolt threads.

No. 1 Graphcoat, per can.....	\$0.50
Each...D.P. \$0.84	



Non-Fluid Oil

Non-Fluid Oil best protects your motor car investment by preventing wear and loss of power more effectively than other lubricants. Insures most efficient, economical and longest service from cars by overcoming the faults of ordinary greases and oil.

Used and recommended by most motor car manufacturers since first days of motoring.

Non-Fluid Oil is not the name of a general class of lubricants, but is a specific product manufactured by New York & New Jersey Lubricant Co. It is identified by sprocket wheel trade-mark above shown.

"K-No. 000" Non-Fluid Oil is of proper consistency for use in Compression Cups on all bearings, for packing Differential Gears, Planetary Transmissions, for Steering Gear Knuckles, Ball and Roller Bearings, Axles and Universal Joints. Lasts longer than any grease.

"K-No. 00-Special" Non-Fluid Oil is softer than the "K-No. 000" grade. Designed particularly for lubricating Sliding Gear Transmissions. It cushions the gear teeth, prevents shocks when changing speeds, prevents abrasion and heating, and assures smooth, quiet running. Reaches and lubricates all shaft bearings.

"K-Forty" Non-Fluid Oil for lubricating Timing Gears. Quiets gears. Won't dry up nor gum. Is not so heavy that the gears plow channels in it, and thereafter get no lubrication; nor so light that it will stew out of gear case.

"A-No. 5" Pump Lubricant. For use in Grease Cups on Circulating Pumps. Is a "waterproof" lubricant. Will not "thin out" and waste. Much cleaner, less expensive than tallow grease.



Prices on all the above.

3-lb. Cans, each.....	\$0.00
Each...D.P. \$0.80	
5-lb. Cans, each.....	1.00
Each...D.P. \$1.33	
10-lb. Cans, each.....	1.75
Each...D.P. \$2.66	
20-lb. Cans, each.....	3.00
Each...D.P. \$5.32	
50-lb. Cans, each.....	7.00
Each...D.P. \$13.30	

"K-No. 4" Non-Fluid Oil (Melting Point 488 deg. Fah.). Proves of great value for use under condition where greases melt and waste, especially on bearings or gears located in hot places. This product will "stay by" universal joints on shaft-driven cars when nothing else will.

Prices No. 4.

3-lb. Cans, each.....	\$0.75
Each...D.P. \$0.92	
5-lb. Cans, each.....	1.25
Each...D.P. \$1.57	
10-lb. Cans, each.....	2.25
Each...D.P. \$3.10	
20-lb. Cans, each.....	4.00
Each...D.P. \$6.20	
50-lb. Cans, each.....	9.50
Each...D.P. \$15.50	



ENAMEL, OIL, ETC.

Engine Enamel

Never-Burn Engine Enamel is specially prepared for use on automobile engines. The heat of the engine bakes the enamel and produces a finish that will not crack nor burn off.

Never-Burn Engine Enamel, gloss black.....	\$0.65
Never-Burn Engine Enamel, flat black.....	.65
Never-Burn Engine Enamel, battleship gray.....	.65
Per Dozen..D.P.	\$11.33



Norwesco Prussian Blue

is made from the finest quality of imported Prussian Blue, ground in pure linseed oil.

It is used by all mechanics to show wear and high spots.

Per tube.....	\$0.15
Per Dozen..D.P.	\$2.66

Wonder-Worker Neats Foot Oil Clutch Compound

is a sure remedy against clutch troubles. A high grade compound for softening and keeping clutch leather in perfect condition.

Is an absolute necessity and should always be kept handy by the owner and driver.

One can may save you no end of time and trouble.

Pint cans, each.....	\$0.25
Per Dozen..D.P.	\$4.44



Jet-Lac

An especially prepared black quick air-drying enamel for enameling lamps, horns and fenders.

Jet-Lac leaves a smooth, rich, durable, elastic finish that is not affected by heat, oil or grease, and is in every respect a high grade article, prepared especially for automobile use. An amateur can apply it, as the enamel runs together after it is applied and leaves no brush marks. Gives a neat and classy appearance to brass work and saves time and bother of polishing brass.

Jet-Lac will not scratch or chip off and will wear as long as any baked-on enamels.

Half-pint can, each.....	\$0.75
Per Dozen..D.P.	\$13.32
Pint can, each.....	1.25
Per Dozen..D.P.	\$22.22
Quart can, each.....	2.25
Per Dozen..D.P.	\$40.00
Gallon can, each.....	8.00
Per Dozen..D.P.	\$142.22



Three-In-One Oil

Three-In-One Oil is an oil of the highest quality. Especially recommended for magneto bearings, the finest also for bicycles, sewing machines, guns, etc.

One-ounce bottles, each.....	\$0.10
Per Dozen..D.P.	\$1.77

Three-ounce bottles, each.....	.25
Per Dozen..D.P.	\$4.00



Wonder-Worker Iron Cement

Here is a metallic chemical iron cement that will withstand heat, oils, grease, steam and gasoline.

When once hardened it becomes a metallic substance which contracts and expands same as the iron. Used extensively for repairing cracks, blow-holes or defects in piping, cylinders, jackets, radiators, etc. Should be in the possession of every auto owner, as Wonder-Worker Iron Cement will save

you long delays and an expensive repairing bill, at the same time enabling any one to make a permanent repair at very low cost.

Pint cans, each.....	\$0.75
Per Dozen..D.P.	\$13.32



Silver Plating Compound

White Way will not put on a permanent silver plating, but when properly applied it will last for several weeks at least, and after the first application it is not nearly the work to go over it again as it would be to polish the brass.

White Way is positively guaranteed to contain no mercury or quicksilver or any other ingredient injurious to any metal to which it may be applied.

Per bottle.....	\$1.25
Per Dozen..D.P.	\$20.00



Silver Plating

EXTRA STRENGTH

U-Kan-Plate is steadily gaining favor with automobile owners. It is really astonishing to see how this preparation transforms an automobile. Nicked portions of the trimmings are made more brilliant than ever, while brass parts are turned to silver of dazzling brightness with one or two applications.

Extra strength U-Kan-Plate Silver-plating Polish (red label).

Half-pint can.....	\$0.75
Per Dozen..D.P.	\$12.77

Pint can.....	1.25
Per Dozen..D.P.	\$20.00

Quart can.....	2.00
Dozen..D.P.	\$30.00

Half-gallon can.....	3.25
Dozen..D.P.	\$53.33





GRAPHITE

Dixon's Graphite Transmission and Differential Grease No. 677



A graphited grease of just the right consistency for all transmission and differential gears, except those intended to be lubricated with light oil. It is the grease the "Speed Kings" use. There is nothing like it on the market. We stand behind this grease with our strongest recommendation.

1-lb. Tin Cans, 36 in case, per lb.	\$0.35
Per Lb. .D.P. \$0.62	
5-lb. Tin Pails, 10 in case, per lb.	.30
Per Lb. .D.P. \$0.53	
10-lb. Tin Pails, 6 in case, per lb.	.25
Per Lb. .D.P. \$0.44	

Dixon's Graphite Gear Oil No. 675



A very light-bodied gear lubricant for use in transmission and differential cases designed for light oil lubrication. Generally speaking, No. 675 should be used only in cases fitted with plain bearings.

1-lb. Tin Cans, 36 in case, per lb.	\$0.35
Per Lb. .D.P. \$0.62	
5-lb. Tin Pails, 10 in case, per lb.	.30
Per Lb. .D.P. \$0.53	
10-lb. Tin Pails, 6 in case, per lb.	.25
Per Lb. .D.P. \$0.44	

Dixon's Graphite Heat-Resisting Grease No. 676



No. 676 is the best grease we know of for universal joints, water pump cups, overhead valve cups and clutch thrust collars. It positively will not melt and run out. This grease should not be used on gears.

1-lb. Tin Cans, 36 in case, per lb.	\$0.35
Per Lb. .D.P. \$0.62	
5-lb. Tin Pails, 10 in case, per lb.	.30
Per Lb. .D.P. \$0.53	
10-lb. Tin Pails, 6 in case, per lb.	.25
Per Lb. .D.P. \$0.44	

Dixon's Motor Graphite

The purest and most carefully selected grade of Flake Graphite, ground to impalpable fineness. May be mixed with oil or grease as required. Its function is to eliminate friction and wear of parts and to increase power. Use it in cylinders, on chains, springs, tires, wheel rims, bearings and wherever friction occurs.



Squirt Cans, per doz.	\$3.33
Per Dozen .D.P. \$6.66	
1-lb. Tin Cans, 36 in case, each	.30
Each .D.P. \$0.53	
1-lb. Tin Cans, 36 in case, each	.50
Each .D.P. \$0.88	
5-lb. Tins Cans, 10 in case, each	2.00
Each .D.P. \$3.55	

Dixon's Graphite Cup Grease



Cup Greases containing fine Flake Graphite reduce friction to a minimum. In summer use Dixon's No. 5; in winter use Dixon's No. 3. Use in all grease cups, wheel spindles, etc. By using these high grade graphite greases the bearings soon acquire the well known graphite polish that eliminates friction and causes easy running.

1-lb. Tin Cans, 36 in case, per lb.	\$0.35
Per Lb. .D.P. \$0.62	
5-lb. Tin Pails, 10 in case, per lb.	.30
Per Lb. .D.P. \$0.53	
10-lb. Tin Pails, 6 in case, per lb.	.25
Per Lb. .D.P. \$0.44	

Dixon's Graphitoleo



Pack wheel spindles and steering gear housings with Graphitoleo. It is the highest grade graphite lubricant made for ball bearings and other fine mechanism. Absolutely warranted not to gum or become rancid. The collapsible tubes are very convenient for automobile use.

8-oz. Tubes, 36 in case, per doz.	\$5.00
Per Dozen .D.P. \$8.88	
1-lb. Tin Cans, 36 in case, per lb.	.55
Per Lb. .D.P. \$0.98	
5-lb. Tin Pails, 10 in case, per lb.	.50
Per Lb. .D.P. \$0.88	
10-lb. Tin Pails, 6 in case, per lb.	.45
Per Lb. .D.P. \$0.80	



GRAPHITE

Dixon's Non-Leak Graphite Grease No. 680



Differential housings of many cars chronically leak at the ends of the axle. No. 680 is the result of several years experimenting with the idea of overcoming this trouble. It is all lubricant, has long life, will not allow gears to cut a path through it like very heavy grease and it does not leak out on the brakes and over the wheels. This special grease should be used only when No. 677 or No. 675 will not stay in the differential housing. It should not be used in transmissions. Great for Fords.

5-lb. Tin Pails (10 in case), per lb.	\$0.30
Per lb.....D.P.	\$0.53
10-lb. Tin Pails (6 in case), per lb.	.25
Per lb.....D.P.	\$0.44
25-lb. Firkin, per lb.	.23
Per lb.....D.P.	\$0.40
50-lb. Keg, per lb.	.22
Per lb.....D.P.	\$0.36

Dixon's Graphite Wood Fiber Grease No. 688

A graphited gear lubricant containing a certain proportion of finely ground cedar fiber. It is prepared especially for noisy gears and leaky housings and is not intended for general use. No. 688 will prevent disagreeable noise and will not drip from the housing. It must be thinned before using.



1-lb. Tin Cans (36 in case), per lb.	\$0.25
Per lb.....D.P.	\$0.44
5-lb. Tin Pails (10 in case), per lb.	.20
Per lb.....D.P.	\$0.36
10-lb. Tin Pails (6 in case), per lb.	.20
Per lb.....D.P.	\$0.36
25-lb. Tin Pails, per lb.	.19
Per lb.....D.P.	\$0.33
50-lb. Kegs, per lb.	.18
Per lb.....D.P.	\$0.32
100-lb. Kegs, per lb.	.17
Per lb.....D.P.	\$0.30

Dixon's Graphite Motor Chain Compound



Dixon's Chain Graphite

Without an equal for lubricating automobile driving chains. When chain is cleaned and immersed in the melted compound no other external or internal applications are necessary. The compound may be used repeatedly. Prevents rust and wear. Put up in cakes of about three pounds each.

Per cake	\$1.00
Per cake.....D.P.	\$1.76

Gredag



This is the only grease lubricant that contains pure, gritless Acheson-Graphite. It is made in the various grades and consistencies to meet all requirements. Gredag is an ideal lubricant for automobile gears, transmissions and universal joints, as it has greater endurance and affords better lubrication. It builds a film that will not break under the pressure when full power is suddenly thrown upon the gears. The teeth will silently engage in mesh and the car will run quietly and sweetly. It will reduce friction and prevent wear. The grades of Gredag strongly recommended for automobile use are: No. 31, semi-fluid; No. 32, soft; No. 33, medium. Either grade of Gredag will serve for a wider range of uses than plain grease.

Price of grades 31, 32 and 33:

5-lb. Can, per lb.	\$0.25	100-lb. Keg, per lb.	\$0.17
Per lb.....D.P.	\$0.39	Per lb.....D.P.	\$0.27
10-lb. Can, per lb.	.24	200-lb. Barrel, per lb.	.16
Per lb.....D.P.	\$0.38	Per lb.....D.P.	\$0.27
25-lb. Can, per lb.	.21	400-lb. Barrel, per lb.	.15
Per lb.....D.P.	\$0.36	Per lb.....D.P.	\$0.24
50-lb. Can, per lb.	.20		
Per lb.....D.P.	\$0.33		

Oildag

No lubricant equals it for use in automobile cylinders. This new lubricant is deflocculated graphite diffused in oil. Deflocculated graphite is finer than dust breathed from the atmosphere. It brings a new principle and new possibilities to the field of lubrication, and marks a modern advance in keeping with the progress made in the power and machine fields.



No. 1 Screw-Top Can, containing charge for 1 gallon oil, each	\$0.25
Each.....D.P.	\$0.33
No. 1 Screw-Top Can, one dozen in a box, by the dozen	2.50
Per dozen.....D.P.	\$3.88
Case contains 6 or 12 dozen No. 1 cans.	
No. 5 Screw-Top Can, containing charge for 5 gallons oil, each	1.00
Each.....D.P.	\$1.66
Case contains 20 No. 5 cans.	
No. 10 Screw-Top Can, containing charge for 10 gallons oil, each	2.00
Each.....D.P.	\$3.32
Case contains 10 or 25 No. 10 cans.	
No. 50 Can, containing charge for 50 gallons oil, each	10.00
Each.....D.P.	\$16.60
Case contains 5, 10 or 25 No. 50 cans.	



SHELLAC, BRONZE, LACQUER AND DYE



Pioneer Rim and Casket Shellac

It is used to cement bicycle tires to their rims; also to coat gaskets so that a perfectly tight union may be made. It does the trick.

Quart cans, each.....	\$1.00
Dozen.. D.P.	\$13.32
Half-pint cans, each.....	.30
Dozen.. D.P.	\$4.80
Two-oz. swab bottles, each...	.15
Dozen.. D.P.	\$2.00

Pioneer Clutch and Brake Compound

Restores leather, cork or composition clutch and brake facings to their original state, causing them to grip with their original tenacity.

This is undoubtedly the best clutch and brake compound on the market. It is prepared on scientific principles and gives absolute satisfaction wherever used.

Per can.....	\$0.35
Per Dozen.. D.P.	\$6.11



Norwesco Aluminum Bronze

It is put up specially for use on radiators, engines, mufflers, etc. Because of its heat resisting qualities it is particularly well adapted to painting those parts of the machine that are subject to heat.

One can will do over the largest size motor.

Per can.....	\$0.60
Per Dozen.. D.P.	\$6.93



Norwesco Retouching Lacquer

A one coat air-drying Lacquer built on a lacquer base instead of a varnish base. This is a very high grade article intended for use on any part of the machine that has become shabby. It is particularly adapted for use on the brass and metal parts about the machine.

Per can.....	\$0.75
Per Dozen.. D.P.	\$13.00

Norwesco Upholstering Dressing

A one coat quick-drying dressing for upholstering and tops. It is furnished in a gloss black finish only and should be applied with a small varnish brush. It dries quickly, giving an even finish which will not crack or rub off. Each can contains enough of the dressing to do over the upholstering on one car.

Per can.....	\$0.60
Per Dozen.. D.P.	\$10.40



Norwesco Lining Dye

Prepared especially for use on auto tops and linings where it is desired to dye the top or lining to cover up dirt and grease spots. This is not a water-proofing dressing, but simply a dye. Each can contains enough to do one top. The material may be applied either with a brush or cloth.

Per can.....	\$0.50
Per Dozen.. D.P.	\$8.66

Never-Rust

The "chemically correct" rim paint used by all motorists who want to prevent tires from sticking to the rims. It protects the tires by preventing the rust from forming and eating into the canvas.

Per can.....	\$0.50
Per Dozen.. D.P.	\$8.00



Norwesco Top Dressing

It imparts a soft, flat, black appearance to leather, pantasote, canvas or mohair. It has the appearance of satin and is, we believe, far superior to the shiny varnishes now used as top dressings. This dressing produces an absolutely waterproof and elastic finish. Each can contains enough dressing to cover the largest size top.

Large can, each.....	\$1.00
Per Dozen.. D.P.	\$17.33
Small can, each.....	.60
Per Dozen.. D.P.	\$10.40





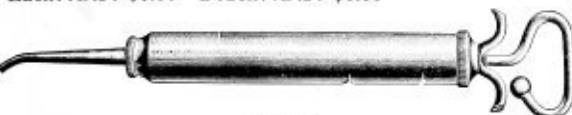
OIL AND GREASE GUNS

Standard Oil Guns



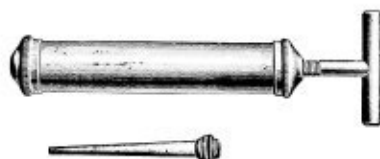
No. 32 B

No. 32 B Standard Oil Gun, $1\frac{1}{2} \times 8$, brass barrel, hook-neck handle, 5-inch bent nozzle, each.....\$0.50
Each..D.P. \$0.66 Dozen..D.P. \$6.66



No. 33 P

No. 33 P Standard Oil Gun, $1\frac{1}{2} \times 8$, brass barrel, cork plunger and metal handle with finger clips, each .85
Each..D.P. \$1.22 Dozen..D.P. 13.33



No. 34 B Standard Grease Gun, $1\frac{1}{2} \times 10$, brass barrel with screw rod, 4 threads to inch, allowing quick action, 4-inch straight spout with large opening cork, plunger and metal handle, each.....1.00
Each..D.P. \$1.33 Dozen..D.P. \$14.44

Pioneer Grease Gun



Pioneer Grease Gun, $1\frac{1}{2} \times 10$, brass barrel, spout turns in all directions, will handle heaviest grease, each.....1.50
Each..D.P. \$2.22 Dozen..D.P. \$24.00

A New Grease Gun



Jumbo Combination Grease and Oil Gun

We offer here a high-grade Combination Grease and Oil Gun, made of extra heavy sheet brass. The barrel is 11 inches long and $2\frac{1}{4}$ inches in diameter and weighs $1\frac{1}{2}$ pounds. Capacity 13 ounces.

The change from grease to oil is quickly made by turning the small thumb nut by hand. Note the combination spout which is curved and conveniently arranged.

The gun is high-grade in every respect; has a large cork plunger and a rapid feed for grease.

Price.....\$2.00
Each..D.P. \$3.33 Dozen..D.P. \$37.33

Townsend Grease Gun



It can be filled—others cannot. It is filled through an opening in its side $1\frac{1}{2}$ inches wide and 8 inches long, while others are supposed to be filled from the end, which is impossible, as when a spoonful or two has been put in, the opening becomes stopped up with a pocket of air behind it and no more can be crammed in.

It is clean—others are dirty. The large opening in its side permits the filling with very little spilling, and that little is prevented from touching the hands by funnel D, cap E and external tube C. All other guns are supposed to be filled from the end, and as the tube is generally about $1\frac{1}{2}$ inches in diameter you have a $1\frac{1}{2}$ -inch circle into which to cram what grease you can, a space far too small; and in filling, the grease spills outside the gun and there is nothing to prevent it from getting on the hands.

Townsend Grease Gun, 6 oz., each.....\$3.00
Each..D.P. \$5.00

Townsend Grease Gun, 8 oz., each.....3.50
Each..D.P. \$5.82

Townsend Grease Gun, 12 oz., each.....4.00
Each..D.P. \$6.66

Townsend Grease Gun, 16 oz., each.....5.00
Each..D.P. \$8.33

Bigsby Grease Gun



The Bigsby Automatic Grease Gun for forcing heavy grease or lubricants into the working parts of automobiles, engines, gear cases and all other kinds of machinery. Makes it possible to oil wearing parts not readily accessible, thereby reducing repair bills to the minimum. Any machine may be oiled without special effort or waste of lubricants. Grease cups may be filled with the heaviest grease. Wearing parts requiring lubrication are easily oiled. Gasoline may be drawn from the fuel tank for priming purposes. An oil nozzle in addition to the regular curved grease spout is supplied with every gun. Easy to operate—simply pull the trigger.

Each.....\$3.00
Each..D.P. \$5.00 Dozen..D.P. \$56.00



PUMPS

Dash Oil and Air Pump



Air Pump

Air Pumps are used for putting an air pressure on the gasoline while traveling through hilly country or at high speed.

No. 275 Air Pump, 11x6 inches, with cock, brass, each.....\$3.50
Each...D.P. \$5.22

No. 275 Air Pump, nicked, each.....3.75
Each...D.P. \$6.33



Oil pumps are used for transferring the oil from the reservoir into the machine.

No. 44 Oil Pump, 11x5 inches, brass, each.....\$5.00
Each...D.P. \$7.44

No. 44 Oil Pump, nicked, each.....5.25
Each...D.P. \$8.55

No. 47 Oil Pump, 11x7 inches, brass, each.....5.50
Each...D.P. \$8.11

No. 47 Oil Pump, nicked, each.....5.75
Each...D.P. \$9.22

No. 49 Oil Pump, 11x7 inches, brass, each.....6.50
Each...D.P. \$9.96

No. 49 Oil Pump, 11x7 inches, nicked, each.....7.00
Each...D.P. \$10.66

Special Oil Pump, 2x10 inches, brass, each.....8.00
Each...D.P. \$11.66

Special Oil Pump, 2x10 inches, nicked, each.....8.50
Each...D.P. \$12.77

Pyro Denatured Alcohol



An anti-freezing solution that defies the action of Snow King. This inexpensive and very efficient liquid in solutions as indicated below will help to keep that car running in the severest weather. This Pyro has the approval of the Society of Automobile Engineers and is recommended by that body.

Its superiority over salt-solution, glycerine or wood alcohol has long been known. It has no harmful effects and requires no skill in mixing.

MIXTURES

20 per cent. Solution—(1 quart of Pyro-Alcohol to 1 gallon of water) freezes at about 10 degrees above zero.

30 per cent. Solution—(1 1/2 quarts of Pyro-Alcohol added to 1 gallon of water) freezes at about 5 degrees below zero.

40 per cent. Solution—(2 quarts of Pyro-Alcohol added to 1 gallon of water) freezes at about 20 degrees below zero.

Pyro-Alcohol, per gallon can.....\$1.00
Per gallon can...D.P. \$1.22

Pyro-Alcohol, 5-gallon can, per gallon......80
Per gallon...D.P. \$1.06

Pyro-Alcohol, half-barrel, per gallon......75
Per gallon...D.P. \$0.97

Pyro-Alcohol, barrel, per gallon......70
Per gallon...D.P. \$0.88

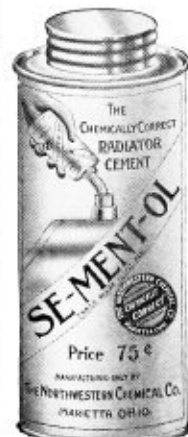
RADIATOR COMPOUNDS

Radi-No-Leak

Radi-No-Leak is an absolutely reliable radiator compound. Stops leaks instantly and prevents formation of scale or rust.

Price, per can.....\$0.75
Dozen...D.P. \$9.44

Radi-No-Leak, packed one dozen in a box. Included in this box is packed one-half dozen 15c size Gibson Quality Mica Powder absolutely free to the dealer. You make your regular big profit on the Radi-No-Leak. The Mica Powder then nets you a nice extra profit.



Se-Ment-Ol

Se-Ment-Ol is a self-acting cement for repairing leaky radiators and cracked water jackets. When poured into the radiator it dissolves in the water, circulates through the cooling system and flows out through the leak. When the Se-Ment-Ol comes in contact with the air in coming through the leak it congeals, forming a clot which stops the leak. This clot hardens, making a permanent repair.

After the cement has "set" the remainder of the Se-Ment-Ol can be drained out through the pet cock, leaving the entire cooling system free from foreign substance.

By using Se-Ment-Ol you can repair leaks while using your car.

Se-Ment-Ol is put up in lithographed cans, each can containing enough Se-Ment-Ol to repair two radiators of ordinary size.

Retail Price, each.....\$0.75
Per dozen...D.P. \$10.66

Blue Ribbon Radiator Cement

When poured into the radiator the cement dissolves thoroughly, and as the solution comes into contact with the air at the leak point it immediately closes the fracture and mends it by forming a permanent and lasting cement filling.

This cement cleans out the circulating system and prevents scale and rust from forming. This preserves the metal and increases the cooling capacity.

9-ounce Package, per can.....\$0.75
Per dozen...D.P. \$8.33





VALVE GRINDING COMPOUNDS

Clover Valve Grinding Compound



Duplex 4oz. Can 40¢

ery or grit, and having no magnetic properties, it will not remain in the pores of cast iron after grinding.

Will not melt or run in temperatures under 200 degrees.

Clover Valve Grinding Compound, 4-oz. boxes, fine and coarse, each\$0.40
Dozen... D.P. \$7.22

Clover Valve Grinding Compound, 1-lb. boxes, fine, each 1.25

Clover Valve Grinding Compound, 1-lb. boxes, medium, each 1.25

Clover Valve Grinding Compound, 1-lb. boxes, coarse, each 1.25

Each... D.P. \$1.95

Eureka Valve Grinding Compound

The Eureka Valve Grinding Compound will grind valves that are in the worst possible condition, and do it without scratching or grooving. Eureka is put up in boxes containing three grades—coarse, medium and fine.

Price\$0.35

Dozen... D.P. \$6.66



Carborundum Valve Grinding Compound In Combination Cans



form surface. The coarse compound is used first for roughing in the valve; the fine compound then gives the valve seat a perfectly true polished surface.

Each\$0.25

Dozen... D.P. \$5.00

For grinding valves, lapping out cylinders, grinding pistons into cylinders, grinding together gearing, roughing in work, grinding shafts into bearings, polishing, etc.

A scientific mixture of abrasive and hard petroleum cutting oil. Ready for use as sold.

Contains no emery or grit, and having no magnetic properties, it will not remain in the pores of cast iron after grinding.

Will not melt or run in temperatures under 200 degrees.

Clover Valve Grinding Compound, 4-oz. boxes, fine and coarse, each\$0.40

Clover Valve Grinding Compound, 1-lb. boxes, fine, each 1.25

Clover Valve Grinding Compound, 1-lb. boxes, medium, each 1.25

Clover Valve Grinding Compound, 1-lb. boxes, coarse, each 1.25

Each... D.P. \$1.95

Carborundum



For the convenience of the motor supply dealer, the garage and repair station owner, and for use in the machine shop, the Carborundum Valve Grinding Compound is put up in one and five-pound cans of the coarse and fine mixtures.

The coarser compound is used first in grinding the valve. It quickly removes all pits or masses of any foreign matter. The finer compound is then used in giving the valve seat a perfectly true, polished surface.

1-lb. tin Carborundum Compound, coarse or fine...\$0.50
Each... D.P. \$0.73

5-lb. tin Carborundum Compound, coarse or fine... 2.00
Each... D.P. \$3.00



Carborundum Valve Grinding Compound is the best medium possible for motor valve grinding. Its use positively assures a perfect valve.

Outfit No. 1, containing two collapsible tubes, cloth strips and booklet, packed in neat cardboard box, complete\$0.75
Dozen... D.P. \$13.33

Outfit No. 2, containing two half-pound tins, coarse and fine grain, cloth strips, booklet, packed in neat cardboard box75
Dozen... D.P. \$13.33



Two dozen tubes of Carborundum Valve Grinding Compound are put up in an attractive display carton for window or counter use. One dozen of the tubes are filled with fine compound and the other dozen with the coarse compound.

Two dozen tubes Carborundum Valve Grinding Compound in display carton\$6.00
Carton D.P. \$8.88





GREASE CUPS

Compression Grease Cup



No. 200



No. 100

- No. 200 Compression Grease Cup, $\frac{3}{4}$ inch inside diameter, $\frac{1}{4}$ ounce capacity, $\frac{1}{8}$ -inch pipe thread, plain steel, each \$0.15
Dozen, D.P. \$1.67
- No. 201 Compression Grease Cup, 1 inch inside diameter, $\frac{1}{2}$ ounce capacity, $\frac{1}{8}$ -inch pipe thread, plain steel, each18
Dozen, D.P. \$1.89
- No. 202 Compression Grease Cup, $1\frac{1}{4}$ inch inside diameter, $\frac{2}{3}$ ounce capacity, $\frac{1}{4}$ -inch pipe thread, plain steel, each20
Dozen, D.P. \$2.89
- No. 99 Compression Grease Cup, $\frac{3}{4}$ inch inside diameter, $\frac{1}{4}$ ounce capacity, $\frac{1}{8}$ -inch pipe thread, polished brass, each25
Dozen, D.P. \$2.47
- Same in nicked finish, each30
Dozen, D.P. \$3.22
- No. 100 Compression Grease Cup, 1 inch inside diameter, $\frac{1}{2}$ -inch pipe thread, polished brass, capacity $\frac{1}{2}$ ounce, each30
Dozen, D.P. \$3.00
- Same in nicked finish, each35
Dozen, D.P. \$3.55
- No. 101 Compression Grease Cup, $1\frac{1}{4}$ inch inside diameter, $\frac{1}{4}$ -inch pipe thread, polished brass, capacity $\frac{2}{3}$ ounce, each35
Dozen, D.P. \$4.00
- Same in nicked finish, each40
Dozen, D.P. \$4.66
- No. 200 Compression Grease Cup, with leather washer, $\frac{3}{4}$ inch inside diameter, $\frac{1}{8}$ -inch pipe thread, polished brass, capacity $\frac{1}{4}$ ounce, each30
Dozen, D.P. \$3.33
- Same in nicked finish, each35
Dozen, D.P. \$4.10
- No. 201 Compression Grease Cup, with leather washer, 1 inch inside diameter, $\frac{1}{8}$ -inch pipe thread, polished brass, capacity $\frac{1}{2}$ ounce, each30
Dozen, D.P. \$3.89
- Same in nicked finish, each35
Dozen, D.P. \$4.44
- No. 202 Compression Grease Cup, with leather washer, $1\frac{1}{4}$ inch inside diameter, $\frac{1}{4}$ -inch pipe thread, polished brass, capacity $\frac{2}{3}$ ounce, each35
Dozen, D.P. \$5.00
- Same in nicked finish, each40
Dozen, D.P. \$5.77



- No. 299 Ratchet Compression Grease Cup, $\frac{3}{4}$ inch inside diameter, $\frac{1}{8}$ -inch pipe thread, polished brass, capacity $\frac{1}{4}$ ounce, each40
Dozen, D.P. \$5.66
- Same in nicked finish, each45
Dozen, D.P. \$6.88
- No. 300 Ratchet Compression Grease Cup, 1 inch inside diameter, $\frac{1}{8}$ -inch pipe thread, polished brass, capacity $\frac{1}{2}$ ounce, each45
Dozen, D.P. \$6.66
- Same in nicked finish, each50
Dozen, D.P. \$7.77
- No. 301 Ratchet Compression Grease Cup, $1\frac{1}{4}$ inch inside diameter, $\frac{1}{4}$ -inch pipe thread, polished brass, capacity $\frac{2}{3}$ ounce, each55
Dozen, D.P. \$8.22

Same in nicked finish, each60
Dozen, D.P. \$9.35

Compression Grease Cup

- No. 500 Special Spring Grease Cup, 1 inch inside diameter, $\frac{1}{8}$ -inch pipe thread, polished brass, capacity $\frac{1}{2}$ ounce, each \$0.65
Dozen, D.P. \$8.00
- Same in nicked finish, each70
Dozen, D.P. \$9.66
- No. 501 Special Spring Grease Cup, $1\frac{1}{4}$ inch inside diameter, $\frac{1}{4}$ -inch pipe thread, polished brass, capacity 1 ounce, each85
Dozen, D.P. \$11.59
- Same in nicked finish, each90
Dozen, D.P. \$13.99



No. 500

De Luxe Grease Cups



The De Luxe is a T-handle compression cup with the plunger threaded on the handle stem and held in place by a collar and groove. This overcomes the objection to this type of cup, as the handle does not protrude when cup is full. Base of cup forms hexagon for wrench and allows of cup fitting flush with article to which attached. Finish is blued steel base with polished nickel or brass body, making a very attractive as well as a strictly high grade cup.

- No. 000 De Luxe Grease Cup, $\frac{3}{4}$ inch inside diameter, $\frac{1}{4}$ ounce capacity, $\frac{1}{8}$ -inch pipe thread, nickel finish, each \$0.60
Dozen, D.P. \$7.33

- No. 00 De Luxe Grease Cup, $\frac{3}{4}$ inch inside diameter, $\frac{1}{4}$ ounce capacity, $\frac{1}{8}$ -inch pipe thread, nickel finish, each80
Dozen, D.P. \$8.00

- No. 0 De Luxe Grease Cup, $1\frac{1}{4}$ inch inside diameter, $\frac{1}{3}$ ounce capacity, $\frac{1}{8}$ -inch pipe thread, nickel finish, each 1.00
Dozen, D.P. \$10.66
- No. 1 De Luxe Grease Cup, $\frac{1}{2}$ inch inside diameter, $\frac{1}{2}$ ounce capacity, $\frac{1}{4}$ -inch pipe thread, nickel finish, each 1.25
Dozen, D.P. \$13.32



No. 1101



No. 1104



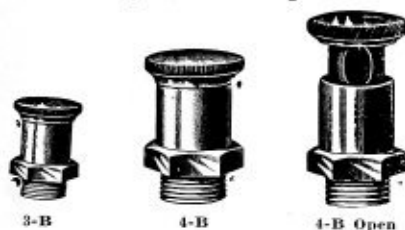
No. 1105

- No. 1101 Grease Cup, nicked finish, $\frac{1}{8}$ -inch pipe thread, capacity $\frac{1}{4}$ ounce, each \$0.25
Dozen, D.P. \$2.00
- No. 1102 Grease Cup, nicked finish, 5/16x32 thread, capacity $\frac{1}{4}$ ounce, each25
Dozen, D.P. \$2.00
- No. 1103 Grease Cup, nicked finish, $\frac{1}{4}$ x32 thread, capacity $\frac{1}{2}$ ounce, each25
Dozen, D.P. \$2.00
- No. 1104 Grease Cup, nicked finish, $\frac{1}{8}$ -inch pipe thread, capacity $\frac{1}{2}$ ounce, each40
Dozen, D.P. \$3.55
- No. 1110 Grease Cup, nicked finish, $\frac{1}{8}$ -inch pipe thread, capacity 1 ounce, each50
Dozen, D.P. \$6.88
- No. 1105 Grease Cup is a very high grade cup, made with a removable shell and nonrising stem; the leather cup plunger travels up and down in the shell and forces the grease out with a quarter turn of handles; highly polished and nickel plated; $\frac{1}{8}$ -inch iron pipe size, capacity $\frac{3}{4}$ ounce, each50
Dozen, D.P. \$6.66



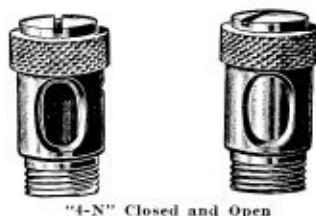
GREASE AND OIL CUPS

Style B Oil Cups



- No. 1-B Oil Cup, Nickel, $\frac{1}{4}$ -in. diameter, 32 thread,
each\$0.10
Dozen.....D.P. \$1.33
- No. 2-B Oil Cup, Nickel, $\frac{3}{8}$ -in. diameter, 32 thread,
each12
Dozen.....D.P. \$1.67
- No. 3-B Oil Cup, Nickel, $\frac{1}{2}$ -in. diameter, 24 thread,
each15
Dozen.....D.P. \$1.88
- No. 4-B Oil Cup, Nickel, $\frac{3}{4}$ -in. diameter, 24 thread,
each20
Dozen.....D.P. \$2.67

Style N Oil Cups



"4-N" Closed and Open

Often an oil cup is to be used in a horizontal or oblique position and in such a place our style "N" may be used as it can be screwed into a tapped hole at almost any angle so that the oil hole is on top.

Our "N" Cup is made with a spring friction fit between inner and outer part, furnishing a smooth working, dust-proof cap which can be turned either way to open but will not jar open.

- No. 1-N Oil Cup, Nickel, $\frac{1}{4}$ -in. diameter, 32 thread,
each\$0.10
Dozen.....D.P. \$1.33
- No. 2-N Oil Cup, Nickel, $\frac{3}{8}$ -in. diameter, 32 thread,
each12
Dozen.....D.P. \$1.67
- No. 3-N Oil Cup, Nickel, $\frac{1}{2}$ -in. diameter, 24 thread,
each15
Dozen.....D.P. \$1.11
- No. 3-N Oil Cup, Brass, $\frac{1}{2}$ -in. diameter, 24 thread
(Ford Size), each15
Dozen.....D.P. \$1.00
- No. 4-N Oil Cup, Nickel, $\frac{3}{4}$ -in. diameter, 24 thread,
each20
Dozen.....D.P. \$2.67

ALOXITE CLOTH AND CARBORUNDUM WHEELS

Aloxite Cloth



Aloxite is a new abrasive material manufactured by The Carborundum Company. It is the ideal abrasive for steel cutting, and when coated on cloth it is far superior to emery for general machine shop work. Aloxite is exceedingly hard and extremely tough, and it not only does better and faster work than emery, but the Aloxite Cloth, because of the toughness of the grain, shows much longer life.

ALOXITE CLOTH IN HANDY PACKAGES.

For the convenience of all users of Aloxite Cloth, the Handy Package meets a long felt want. Each envelope contains six 9x11-inch sheets of any desired grits.

- Aloxite Cloth, Handy Package, each\$0.35
Each.....D.P. \$0.56

In ordering state grits wanted.

- Aloxite Cloth, Crocus, per quire\$1.35
Aloxite Cloth, F, per quire1.35
Aloxite Cloth, 2/0, per quire1.35
Aloxite Cloth, 0, per quire1.35
Per quire.....D.P. \$1.55
Aloxite Cloth, 1, per quire1.45
Per quire.....D.P. \$1.67
Aloxite Cloth, 14, per quire1.50
Per quire.....D.P. \$1.78
Aloxite Cloth, 2, per quire1.60
Per quire.....D.P. \$1.89

Carborundum Wheels



- Carborundum Wheels, 4 inch diameter, 1 inch thick, $\frac{1}{8}$ inch arbor hole. Each.....D.P. \$1.60
- Carborundum Wheels, 4 inch diameter, $\frac{3}{8}$ inch thick, $\frac{1}{8}$ inch arbor hole. Each.....D.P. 1.35
- Carborundum Wheels, 6 inch diameter, 1 inch thick, $\frac{3}{8}$ inch arbor hole. Each.....D.P. 3.05
- Carborundum Wheels, 6 inch diameter, $\frac{3}{8}$ inch thick, $\frac{1}{8}$ inch arbor hole. Each.....D.P. 2.40
- Carborundum Wheels, 8 inch diameter, 1 inch thick, 1 inch arbor hole. Each.....D.P. 4.60
- Carborundum Wheels, 10 inch diameter, 1 inch thick, 1 inch arbor hole. Each.....D.P. 6.35
- Carborundum Wheels, 10 inch diameter, $\frac{1}{2}$ inch thick, 1 inch arbor hole. Each.....D.P. 7.70
- Carborundum Wheels, 12 inch diameter, $\frac{1}{2}$ inch thick, $\frac{1}{2}$ inch arbor hole. Each.....D.P. 9.00
- The above are all 80 grit, which is suitable for general work.



PRIMERS AND PET COCKS



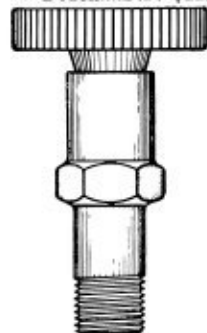
Primers Cups



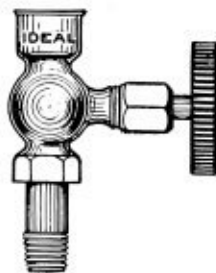
- | | | | |
|---|--------|---|--------|
| Nos. 1 and 2 | | Nos. 3 and 4 | |
| No. 1 Primers Cup, upright long shank, $\frac{1}{4}$ -in. pipe thread, each | | No. 3 Primers Cup, angle long shank, $\frac{1}{4}$ -in. pipe thread, each | |
| Dozen...D.P. | \$3.33 | Dozen...D.P. | \$3.55 |
| No. 2 Primers Cup, upright long shank, $\frac{1}{4}$ -in. pipe thread, each | | No. 4 Primers Cup, angle long shank, $\frac{1}{4}$ -in. pipe thread, each | |
| Dozen...D.P. | \$3.55 | Dozen...D.P. | \$4.66 |
| No. 3 Primers Cup, angle long shank, $\frac{1}{4}$ -in. pipe thread, each | | No. 4 Primers Cup, angle long shank, $\frac{1}{4}$ -in. pipe thread, each | |
| Dozen...D.P. | \$4.66 | Dozen...D.P. | \$4.88 |



- | | | | |
|--|--------|--|---------|
| Nos. 5 and 6 | | Nos. 112 and 113 | |
| No. 5 Primers Cup, upright short shank, $\frac{1}{4}$ -in. pipe thread, each | | No. 112 Primers Cup, upright long shank traction lever, $\frac{1}{4}$ -in. pipe thread, each | |
| Dozen...D.P. | \$3.55 | Dozen...D.P. | \$11.10 |
| No. 6 Primers Cup, upright short shank, $\frac{1}{4}$ -in. pipe thread, each | | No. 113 Primers Cup, upright long shank traction lever, $\frac{1}{4}$ -in. pipe thread, each | |
| Dozen...D.P. | \$3.78 | Dozen...D.P. | \$11.99 |



Ideal Primers Cups



- This Primers Cup is a radical departure from the old style primers cups now on the market and is designed on the needle valve principle.
- | | |
|---|--------|
| No. 34 Ideal Primers Cups, $\frac{1}{4}$ -in., brass, each | |
| Dozen...D.P. | \$4.80 |
| No. 34 Ideal Primers Cups, $\frac{1}{4}$ -in., nickel, each | |
| Dozen...D.P. | \$5.55 |
| No. 35 Ideal Primers Cups, $\frac{1}{4}$ -in., brass, each | |
| Dozen...D.P. | \$6.11 |
| No. 35 Ideal Primers Cups, $\frac{1}{4}$ -in., nickel, each | |
| Dozen...D.P. | \$6.66 |



Nos. 16 and 17



Nos. 26 and 27

- | | |
|--|--------|
| No. 16 Pet Cock, $\frac{1}{4}$ -in. pipe thread, each | \$0.25 |
| Dozen...D.P. | \$2.67 |
| No. 17 Pet Cock, $\frac{1}{4}$ -in. pipe thread, each | .25 |
| Dozen...D.P. | \$3.00 |
| No. 26 Pet Cock, bibb nose, $\frac{1}{4}$ -in. pipe thread, each | .35 |
| Dozen...D.P. | \$4.66 |
| No. 27 Pet Cock, bibb nose, $\frac{1}{4}$ -in. pipe thread, each | .40 |
| Dozen...D.P. | \$5.33 |

Shut-off Cocks



Nos. 10 and 11



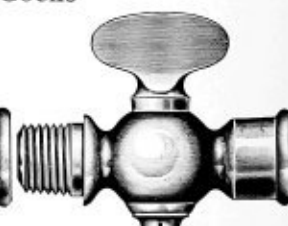
Nos. 10 and 11

- | | |
|--|--------|
| No. 10 Shut-off Cock, $\frac{1}{4}$ -in. pipe thread and $\frac{1}{2}$ -in. tubing, each | \$0.60 |
| Dozen...D.P. | \$9.44 |
| No. 11 Shut-off Cock, $\frac{1}{4}$ -in. pipe thread and $\frac{1}{2}$ -in. tubing, each | .60 |
| Dozen...D.P. | \$9.44 |
| No. 110 Shut-off Cock, both ends for $\frac{1}{4}$ -in. tubing, each | .60 |
| Dozen...D.P. | \$9.44 |
| No. 111 Shut-off Cock, both ends for $\frac{1}{2}$ -in. tubing, each | .60 |
| Dozen...D.P. | \$9.44 |

Air Cocks



37, 38, 39



40, 41, 42

- | | |
|---------------------------------------|--------|
| No. 37 Air Cock, $\frac{1}{4}$, each | \$0.65 |
| Dozen...D.P. | \$5.55 |
| No. 38 Air Cock, $\frac{1}{4}$, each | .70 |
| Dozen...D.P. | \$5.77 |
| No. 39 Air Cock, $\frac{3}{8}$, each | .85 |
| Dozen...D.P. | \$6.66 |
| No. 40 Air Cock, $\frac{1}{4}$, each | .75 |
| Dozen...D.P. | \$5.77 |
| No. 41 Air Cock, $\frac{1}{4}$, each | .80 |
| Dozen...D.P. | \$6.11 |
| No. 42 Air Cock, $\frac{3}{8}$, each | .90 |
| Dozen...D.P. | \$6.66 |



SOLDER, BRAZING COMPOUND, ETC.

Wire Solder



No. 10 Wire Solder

This comes on large spools. Cut any amount.

Per Pound.....\$0.60
Per Pound...D.P. \$0.66

Bar Solder



Half and Half Solder, per pound.....\$0.60
Per Pound...D.P. \$0.66

Reinhold "No Flux" Aluminum Solder



100% Efficiency

This solder is recognized as the highest standard, is scientifically compounded, and the result of exhaustive investigation. It can be compared with the aluminum solders, so termed, which are prepared from random mixtures and uncertain formulas.

Any person can use the Reinhold Solder with an ordinary, clean soldering iron, blow-pipe or gasoline torch. The fact that it does not require an expert to use it is a strong point in its favor.

We are in position to meet every known need for Aluminum Solder and list in the following the regular and special mixtures:

No. 1 Reinhold No Flux Aluminum Solder, 4 oz. bar, each \$1.00
Each...D.P. \$1.11
No. 2 Reinhold No Flux Aluminum Solder, 2 oz. bar, each .50
Each...D.P. \$0.60
No. 4 Reinhold No Flux Aluminum Solder, 4-5 oz. bar, each .25
Each...D.P. \$0.25
No. 5 Reinhold No Flux Aluminum Solder, 8 oz. bar, each 2.00
Each...D.P. \$2.22

Soldering Coppers



Soldering Coppers, $\frac{1}{2}$ lb., each.....\$0.45
Each...D.P. \$0.66
Soldering Coppers, 1 lb., each......60
Each...D.P. \$0.88
Soldering Coppers, $1\frac{1}{2}$ lb., each......75
Each...D.P. \$1.22

Spelter



Wire Spelter, 9 gauge, per pound.....\$0.65
Per Pound...D.P. \$0.77



Soft Grain Brazing Spelter, per pound.....\$0.50
Per Pound...D.P. \$0.66

Wonder Worker Brazing Compound



Every repair shop, no matter how small or remote, finds use for a brazing compound that will actually braze cast iron with surety.

It will be no longer necessary to send castings or ordinary joints to the factory to be made, as the above will do the work in ten minutes, at a very low cost.

This compound is a high grade article, and will insure a clean, bright and secure joint, free from all scale.

One Pound Packages, each.....\$0.50
Dozen...D.P. \$8.00

Wonder Worker Solder Paste

The most effective, quick, active and non-corrosive soldering paste, which absolutely will not freeze or decompose. Can be used with any soldering flux, and will solder any metal except aluminum. Works freely on galvanized iron, lead, tinned steel and other metals. Used extensively by plumbers and tin workers in general. Prepared especially for needs of automobile repairers, dynamo builders, telephone makers, and by all the trades in general.



Two-Ounce Cans, each.....\$0.25
Dozen...D.P. \$4.00

Babbitt Metal



No. 4 Babbitt Metal, per pound.....\$0.20
Per Pound...D.P. \$0.22
No. 2 Babbitt Metal, per pound......30
Per Pound...D.P. \$0.33

The Gem Soldering Set, No. 2



Comprises one bar of solder, one box of resin, a scraper, and a soldering copper.

Copper is of sufficient size to retain heat.

Packed one set in a wooden box, which is inclosed in a pasteboard carton.

No. 2 Gem Soldering Set, each.....\$1.00
Each...D.P. \$1.11



CARBON REMOVERS, RIVETS AND WASHERS

Prest-O-Carbon Remover



Quickly and absolutely removes all deposits of carbon from cylinders, piston rings and valves, producing more power and speed and eliminating all troubles caused by the presence of carbon deposits within the motor.

Gallon Can, each	\$3.75
Each...D.P.	\$5.77
Half-Gallon Can, each	2.00
Each...D.P.	\$3.11
Quart Can, each	1.00
Each...D.P.	\$1.55

Carbonox

Carbonox is put up in lithographed cans, each can containing enough to keep a four-cylinder engine free from carbon for six months. The cans are fitted with detachable oil can spouts which may be inserted in the spark plug opening and the Carbonox injected by pressure on the spring bottom.

Carbonox does not dissolve the carbon, but attacks the charred oil that fastens the flakes of carbon to each other and to the cylinder, piston head, etc. After destroying this charred oil the carbon is left in a loose, flaky condition and is blown out with the exhaust.

Per can	\$0.75
Each...D.P.	\$0.88



Mound Carbon Scrapers



For removing carbon from cylinders and piston heads without tearing down engine. Made of $\frac{3}{4}$ -inch crucible steel, hand forged, nickel plated, apple wood handles.

Set No. 55, in box	\$0.80
Per set...D.P.	\$0.77

Mound Three-Square Scrapers



Made of the best file steel and hollow ground, with hard maple handle, stained and polished.

Each	\$0.30
Each...D.P.	\$0.33

Flexible Carbon Scrapers



No. 57 Mound Flexible Carbon Scraper, each	\$0.35
Each...D.P.	\$0.40

Mound Curved Bearing Scrapers



These scrapers have just the right curve on blade for scraping metal bearings and

grooves on automobiles.

Forged from the finest grade of steel, properly tempered for effective work.

Hollow ground and polished, mounted in rosewood handles. Packed in neat box.

No. 7 Set of Three	\$1.25
Per set...D.P.	\$1.44

Rivets

Copper rivets and burs in $\frac{1}{2}$ -lb. boxes, assorted lengths from $\frac{1}{8}$ to $\frac{3}{4}$.



No. 8 Copper Rivets and Burs, assorted, $\frac{1}{2}$ -pound box, each	\$0.40
Each...D.P.	\$0.40
No. 10 Copper Rivets and Burs, assorted, $\frac{1}{2}$ -pound box, each	.45
Each...D.P.	\$0.45
No. 12 Copper Rivets and Burs, assorted, $\frac{1}{2}$ -pound box, each	.50
Each...D.P.	\$0.50

Special Brake Band Copper Rivets



No. 9 Brake Band Copper Rivets in $\frac{1}{2}$ -lb. boxes, $\frac{1}{2}$ inch, per box

Per box...D.P. \$0.40

No. 9 Brake Band Copper Rivets in $\frac{1}{2}$ -lb. boxes, $\frac{1}{2}$ inch, per box

Per box...D.P. \$0.40

No. 9 Brake Band Copper Rivets in $\frac{1}{2}$ -lb. boxes, $\frac{1}{2}$ inch, per box	\$0.40
Per box...D.P.	\$0.40

Slotted Coppered Rivets, Fifty in Box

No. 1 Slotted Coppered Rivets, $\frac{1}{2}$ -in., per box

Per dozen boxes...D.P. \$1.66

No. 1 Slotted Coppered Rivets, $\frac{3}{8}$ inch, per box

Per dozen boxes...D.P. \$1.66

No. 1 Slotted Coppered Rivets, $\frac{1}{4}$ inch, per box

Per dozen boxes...D.P. \$1.76

Slotted Brass Rivets Fifty in Box

No. 10 Slotted Brass Rivets, $\frac{1}{2}$ inch, per box

Per dozen boxes...D.P. \$4.00

No. 10 Slotted Brass Rivets, $\frac{3}{8}$ inch, per box

Per dozen boxes...D.P. \$4.00

No. 10 Slotted Brass Rivets, $\frac{1}{4}$ inch, per box

Per dozen boxes...D.P. \$4.44

Sheet Felt and Felt Washers

No. 1 Felt Washers, $2\frac{1}{2} \times \frac{1}{2}$

$\times \frac{1}{8}$, per dozen

Per dozen...D.P. \$0.50

No. 2 Felt Washers, $2\frac{1}{2} \times 1\frac{1}{8}$

$\times \frac{1}{8}$, per dozen

Per dozen...D.P. \$0.60

No. 3 Felt Washers, $2 \times 1\frac{1}{8}$

$\times \frac{1}{8}$, per dozen

Per dozen...D.P. \$0.40

No. 4 Felt Washers, $1\frac{1}{2} \times \frac{1}{8}$

$\times 7/32$, per dozen

Per dozen...D.P. \$0.30

No. 5 Felt Washers, $2\frac{1}{2} \times \frac{1}{4}$, per dozen

Per dozen...D.P. \$0.60

No. 6 Felt Washers, $3 \times 2\frac{1}{2} \times \frac{1}{4}$, per dozen

Per dozen...D.P. \$0.70

No. 7 Felt Washers, $3\frac{1}{2} \times 2\frac{1}{2} \times \frac{1}{4}$, per dozen

Per dozen...D.P. \$0.75

No. 8 Felt Washers, $3\frac{1}{2} \times 2\frac{1}{2} \times \frac{1}{4}$, per dozen

Per dozen...D.P. \$1.00

Best quality felt for washers or gaskets in sheets

36×36 inches.

No. 32 Blue Felt, $\frac{1}{4}$ inch, per pound

No. 32 Blue Felt, $\frac{3}{8}$ inch, per pound

No. 32 Blue Felt, $\frac{1}{2}$ inch, per pound

Per pound...D.P. \$2.77

A sheet of $\frac{1}{4}$ inch weighs about 21 pounds.



SHIM STOCK AND BEARING BRONZE

Shim Stock



This stock is essential to every well regulated shop and is put up in convenient packages. It is supplied in thicknesses varying from .002 to .15 of an inch in 2½-inch strips, as illustrated.

No. 1 Shim Stock—Package contains 4 rolls of special sheet brass, 50 inches in length to each roll, 2½ inches wide, making a total of 500 square inches; per box...\$1.00 Per Box...D.P. \$1.66

No. 2 Shim Stock—Contents, one-half of No. 1, per box... .65 Per Box...D.P. \$0.88

Laminum



In selecting a Shim for any purpose, your choice must be made from among the three types which are in use. The trouble encountered in the use of the original solid brass Shim, the expensive filing and scraping by an expert mechanic, and the difficulty of obtaining accurate thickness and an even surface, led to the adoption by some of the loose-leaf Shim. But it was found that dirt and grease would get between the layers, and would work out under pressure, thus leaving a loose bearing.

The careful study and experiments of specialists has evolved laminum, which, as its name implies, is a material composed of innumerable thin layers or laminations of hard brass held together by a metal binder. These layers are made in two thicknesses—.002 and .003 inches. By peeling off successive layers of the metal anyone may obtain a perfectly smooth, solid, and uniform shim of any desired exact thickness. For the convenience of automobile repairmen and mechanics, laminum is put up in various packages, which are listed below.

No. 3 Assortment Laminum containing three strips 1/32 x 2 x 9 inches, all .002 lamination, each...\$1.25 Each...D.P. \$2.45

No. 4 Assortment Laminum containing three strips 1/32 x 2 x 9 inches, all .003 lamination, each... 1.25 Each...D.P. \$2.45

Bunting Bearing Bronze



Cored Bars of Bunting Bearing Metal produced in various dimensions to be readily machined to the proper size bearing, made from the famous Bunting Bearing Metal which has been used so generally for several years past wherever the highest grade of bronze bearings were required.

BUNTING BEARING BRONZE—PRICES

Piece No.	Outside Diameter	Inside Diameter	Length	Approximate Weight
		Solid		1¼
A	1	½	12	2
B	1¼	¾	12	3½
C	1½	¾	12	5
D	2	1	12	7
E	2½	1½	12	8½
F	3	2	12	10
G	3½	2½	12	11½

When ordering, use the letters at the left to denote size required.

Bunting Bearing Bronze, per pound...\$0.80
Per Pound...D.P. \$0.80

Non-Gran Bearing Bronze



High Speed Non-Gran Bearing Bronze, cored bars for bushings at new low prices. You can now secure the same bronze used in the Packard, Locomobile, Marmon, Mercer, etc., at very near the cost of inferior bronzes. All bars absolutely guaranteed, no flaws, no waste, perfect cores.

A brand new assortment, 20½ pounds. It takes care of every bushing need up to a shaft diameter of 1½ in.



Means less stock and more money for repairmen. The six different sizes of Non-Gran Bars in this assortment make fifty-four standard and all intermediate bushing sizes. This little inexpensive assortment of genuine standard Non-Gran Bars answers every possible bushing need up to and including a shaft diameter of 1½ inches. It takes care of every one of the bushing sizes which any automobile repairman has most constant call for. Not a single bar which will prove a "dead one." Most everything you need is there; nothing is there you do not need. Every repair shop, machine shop, lathe equipped garage will recognize in this new assortment the best possible investment.

Special price on this new 6-54 assortment...D.P. \$21.51
Per Pound...D.P. \$1.05

These are the 6-54 Assortment Bars

	"A" ¾-inch solid
	"B" 1 x ½-inch
	"C" 1¼ x ½-inch
	"D" 1½ x ¾-inch
	"E" 1¾ x 1-inch
	"F" 2 x 1-inch

In addition to this 6-54 assortment we are prepared to make prompt shipment on all standard and near-standard Non-Gran Bars of any diameter you may need.
Per Pound...D.P. \$1.16



OIL CANS

Dover Non-Leakable Steel Oilers

Especially adapted for gasoline for priming. With extra large mouths. Easy to fill. New easy locking spout. Gets rid of all cross threading. One-half turn securely locks the spout on the can. Likewise one-half turn removes the spout.

The greatest improvement ever made to an oiler.

COPPERIZED
Patented



	Quantity	Diameter, Inches	Length of Spout, Inches	Each
No. 013	1/3 pt.	3 3/4	3	\$0.40
Per Dozen..D.P.	\$5.00			
No. 013A	1/3 pt.	3 3/4	5	.45
Per Dozen..D.P.	\$5.33			
No. 014	1/3 pt.	3 3/4	9	.50
Per Dozen..D.P.	\$5.88			
No. 014A	1/2 pt.	3 3/4	3	.55
Per Dozen..D.P.	\$6.60			
No. 014AA	1/2 pt.	3 3/4	5	.60
Per Dozen..D.P.	\$7.22			
No. 011B	1/2 pt.	3 3/4	9	.65
Per Dozen..D.P.	\$7.77			
No. 015	1 pt.	4 1/4	3	.70
Per Dozen..D.P.	\$8.33			
No. 015A	1 pt.	4 1/4	5	.75
Per Dozen..D.P.	\$8.88			
No. 016	1 pt.	4 1/4	9	.80
Per Dozen..D.P.	\$9.44			

Dover Steel Oilers

A superior oiler, with extra large mouths. Easy to fill. New easy locking spout. Gets rid of all cross threading. One-half turn securely locks the spout on the can, likewise one-half turn removes the spout.

Made from 20-gauge cold rolled steel, copper plated inside and out. Clock spring steel bottoms. All spouts from 3 to 9 inches interchangeable.

COPPERIZED



	Quantity	Diameter, Inches	Length of Spout, Inches	Each
No. 13	1/3 pt.	3 3/4	3	\$0.35
Per Dozen..D.P.	\$2.77			
No. 13A	1/3 pt.	3 3/4	5	.30
Per Dozen..D.P.	\$3.00			
No. 14	1/3 pt.	3 3/4	9	.33
Per Dozen..D.P.	\$3.32			
No. 14A	1/2 pt.	3 3/4	3	.35
Per Dozen..D.P.	\$3.06			
No. 14AA	1/2 pt.	3 3/4	5	.38
Per Dozen..D.P.	\$3.88			
No. 14B	1/2 pt.	3 3/4	9	.40
Per Dozen..D.P.	\$4.22			
No. 15	1 pt.	4 1/4	3	.42
Per Dozen..D.P.	\$4.41			
No. 15A	1 pt.	4 1/4	5	.45
Per Dozen..D.P.	\$4.66			
No. 16	1 pt.	4 1/4	9	.50
Per Dozen..D.P.	\$5.23			

Dover Auto Pump Oilers



COPPERIZED

	Quantity	Diameter, Inches	Length of Spout, Inches	Each
No. 800	1/2 pt.	3 3/4	3	\$1.30
Per Dozen..D.P.	\$20.06			
No. 801	1/2 pt.	3 3/4	5	1.60
Per Dozen..D.P.	\$21.10			
No. 802	1/2 pt.	3 3/4	9	1.75
Per Dozen..D.P.	\$21.55			
No. 803	1 pt.	4 1/4	5	1.85
Per Dozen..D.P.	\$22.76			
No. 804	1 pt.	4 1/4	9	2.00
Per Dozen..D.P.	\$23.33			

Dover Compact Oilers

A very handy and convenient oiler to carry in tool box. Four-inch reversible spout with metal cap. Drip cap at base of spout catches all surplus oil. Occupies very small space, easily carried in tool box. Its powerful spring makes it practically a squirt gun, as it will throw a stream of oil into any part of the car.



HEAVILY COPPER PLATED

No. 10.	1/2-pt. 6 1/2-in. long x 3-in. wide x 1 1/8-in. thick	each	\$0.50
Dozen..D.P.	\$8.00		

Oil Can Holder



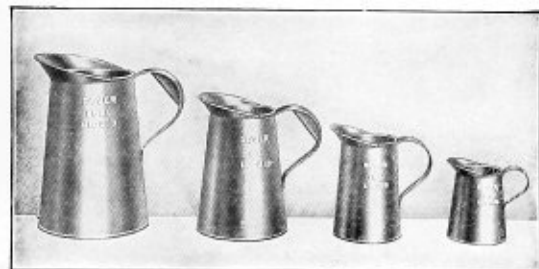
To be attached to dash under hood. Oil or priming can ready for instant use. Oil is kept warm in cold weather.

Price, without can	\$0.35
Doz..D.P.	\$2.22
Price, with can	.50
Doz..D.P.	\$5.32



MEASURES

Dover Auto Oil Measures



HEAVY WEIGHT Heavily Copper Plated and Lacquered

No.	Size	Side Handle	Diam. Bottom Inches	Height Inches	Each
No. 8	1-pt.	Side Handle	3 1/2	4 1/4	\$0.40
Per dozen					D.P. \$8.00
No. 11	1-qt.	Side Handle	4 1/2	5 3/4	.50
Per dozen					D.P. \$10.00
No. 12	2-qt.	Side Handle	5 1/2	7 1/4	.70
Per dozen					D.P. \$14.00
No. 14	4-qt.	Side Handle	6 1/2	9 3/4	.90
Per dozen					D.P. \$18.00

Dover Auto Gasoline Measures



HEAVILY COPPER PLATED AND LACQUERED

Extra Heavy Weight with Re-enforced Bottoms

No.	Size	with Bail	Diam. Bottom Inches	Height Inches	Each
No. 18	2-gal.	with Bail	9 1/2	9 1/4	\$2.25
Per dozen					D.P. \$44.00
No. 22	5-gal.	with Bail	12 1/2	12 1/4	3.00
Per dozen					D.P. \$60.00

Dover Simplex Gasoline Measure



A Practical Easy Pouring Measure Heavily Copper Plated and Lacquered

No.	Size	with Bail	Diam. Bottom Inches	Height Inches	Each
No. 118	2-gal.	with Bail	9 1/2	14	\$2.50
Per dozen					D.P. \$50.00
No. 222	5-gal.	with Bail	12 1/2	19	3.50
Per dozen					D.P. \$70.00

Dover Duplex Combination Measure and Funnel



Extra Heavy Weight.

No.	Size	Side Handle	Diam. Bottom Inches	Height Inches	Diam. Spout Inches	Each
No. 2 1/2	1/2-pt.	Side Handle	2 1/4	4 1/4	5/16	\$0.50
Per dozen						D.P. \$8.88
No. 5	1-pt.	Side Handle	3 1/2	5 1/4	3/8	.58
Per dozen						D.P. \$10.55
No. 10	1-qt.	Side Handle	4 1/2	7 1/4	7/16	.74
Per dozen						D.P. \$13.32
No. 20	2-qt.	Side Handle	5 1/2	9 1/4	1/2	1.00
Per dozen						D.P. \$17.77
No. 40	4-qt.	Side Handle	6 1/2	12 1/4	11/16	1.36
Per dozen						D.P. \$25.00
No. 20 1/2	1 1/2-pt.	Side Handle	2 3/4	4 3/4	5/16	\$0.55
Per dozen						D.P. \$10.00
No. 50	1-pt.	Side Handle	3 1/2	5 1/4	3/8	.65
Per dozen						D.P. \$12.00
No. 100	1-qt.	Side Handle	4 1/2	7 1/4	7/16	.80
Per dozen						D.P. \$14.44
No. 200	2-qt.	Side Handle	5 1/2	9 1/4	1/2	1.05
Per dozen						D.P. \$19.33
No. 400	4-qt.	Side Handle	6 1/2	12 1/4	11/16	1.10
Per dozen						D.P. \$25.00

Dover Saval Combination Measure and Funnel with Automatic Shut-Off Attachment



Simple in Construction, Positive in Action and Everlasting in Quality.

Heavily Copper Plated.

No.	Size	Side Handle	Diam. Bottom Inches	Height Inches	Diam. Spout Inches	Each
No. 210	1-qt.	Side Handle	4 1/2	7 1/4	7/16	\$1.00
Per dozen						D.P. \$20.00
No. 220	2-qt.	Side Handle	5 1/2	9 1/4	1/2	1.25
Per dozen						D.P. \$25.00
No. 240	4-qt.	Side Handle	6 1/2	12 1/4	11/16	1.75
Per dozen						D.P. \$35.22

Positively Prevents Overflowing the Oil Tank and Spilling Oil Over the Engine and Other Parts

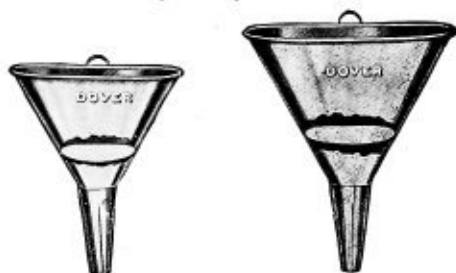
It is not only a most practical measure, combined with a funnel for convenience in pouring, but has in the spout a brass ball valve (ground oil tight) to shut off the flow of the oil instantly (in a very simple manner) at the convenience of the user.



FUNNELS

Dover Portable Funnel

With Fine Brass Strainers **OVAL** Heavily Copper Plated
Square Top Pattern



Extra Heavy Weight					
	Length, Inches	Width, Inches	Height, Inches	Diam. Outlet, Inches	Each
No. 1, 1-pt.	5½	2½	6½	½	\$0.50
Per Dozen D. P. \$8.00					
No. 001, 1-pt.	5½	2½	6½	½	.40
Per Dozen D. P. \$6.40					
No. 2, 1-pt.	7¼	3½	8½	¾	.60
Per Dozen D. P. \$9.60					

Oval Top Pattern



	Length, Inches	Width, Inches	Height, Inches	Diam. Outlet, Inches	Each
No. 01, 1-pt.	6½	3	6¾	¾	\$0.30
Per Dozen D. P. \$4.80					
No. 02, 1-pt.	8	3½	8	1	.44
Per Dozen D. P. \$7.22					

These funnels are made especially to carry on auto; oval shape, occupy small space, have an extra large spout so that while the body is small the gasoline will run through the funnel very fast, an important feature. The tube on funnel is fluted so that it will not get air bound while pouring.

Dover Standard Gasoline Auto Funnels

With Fine Brass Strainers and Movable Hoop to Hold Chamois



Heavily Copper Plated

	Diam. Top, Inches	Height, Inches	Diam. Outlet, Inches	Each
No. 10, 1-pt.	5	6¾	½	\$0.60
Per Dozen D. P. \$10.88				
No. 20, 2-pt.	8½	9½	¾	.75
Per Dozen D. P. \$14.00				
No. 40, 4-pt.	9¾	11	¾	1.00
Per Dozen D. P. \$18.00				
No. 80, 8-pt.	12	12½	¾	1.25
Per Dozen D. P. \$22.77				

A Very Important Feature

We have put beads or fluted the lower part of the body for use in tanks with large openings, so that if the filler opening in the tank is larger than the spout and the lower part of the body of the funnel goes down into the tank opening, the beads form an air space and prevent the funnel from becoming air bound.

Shut-off Funnel

A PERFECT GASOLINE
AUTO FUNNEL

Galvanized

A new and convenient shape. Very practical, both for garage and automobile owners' use. An ideal funnel for motor boats. Complete with chamois skin attached. Positive in action, simple in construction and everlasting in quality.



	Diam. Top, Inches	Depth, Inches	Diam. Spout, Inches	Each
No. 24, 6-qts.	10½	5½	¾	\$2.25
Per Dozen D. P. \$45.33				
No. 28, 8-qts.	12½	6	¾	2.50
Per Dozen D. P. \$50.00				

Simply lift the funnel from the filling hole in the tank or can and no more gasoline can run through the spout. A necessity to safety and economy.



Dover Gasoline Funnels

Oval Pattern Copper Plated

With movable inside hoop for chamois, detachable spouts and fine brass strainers.

	Diam. Top, Inches	Height less Spout, In.	Diam. Outlet, Inches	Each
No. 26	9½ x 4	7	¾	\$1.40
Per Dozen D. P. \$28.00				
No. 27	8½ x 3½	6½	¾	1.10
Per Dozen D. P. \$22.00				

Dover Gasoline Auto Funnels

Designed Especially for New Cars with Large Tank Openings
The Fastest Flowing Funnel Made



Heavily Copper Plated

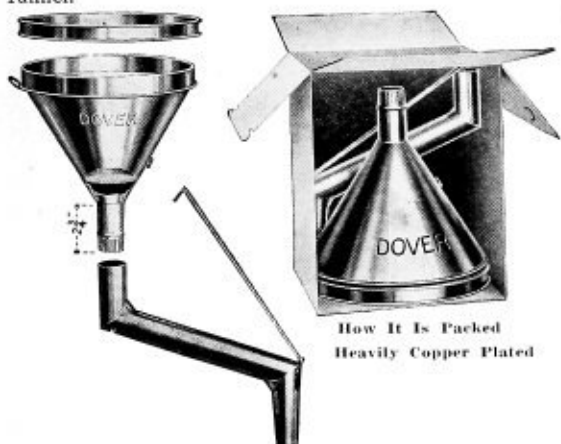
	Diam. Top, Inches	Height, Inches	Diam. Outlet, Inches	Each
No. 240, 4-qts.	9¾	12	2	\$1.00
Per Dozen D. P. \$20.00				
No. 280, 8-qts.	12	13½	2	1.25
Per Dozen D. P. \$25.00				



FUNNELS, PAILS AND TANKS

New Dover Two-in-One Offset Gasoline Funnel

With fine brass strainer, movable hoop to hold chamois. Spout easily removed, thus forming a regular funnel.



How It Is Packed
Heavily Copper Plated

	Diam. of Top Inches	Diam. of Outlet Inches	Each
No. 4000 4-qt.	9 $\frac{1}{2}$	1	\$2.00
Per dozen...D.P.			\$36.00
No. 8000 8-qt.	12	1 $\frac{1}{2}$	2.25
Per dozen...D.P.			\$41.10

The increasing practice of carrying the gasoline in the rear tanks has greatly increased the demand of our offset Funnel, and after a careful study of the same we have re-designed our offset Funnel so that these tanks may be filled easily and quickly.

Dover Leviathan Garage Funnel

Six-gallon capacity, extra heavy; has seamless brass spout threaded in brass base on bottom, thus being removable, facilitating shipping and preventing breakage. Complete with chamois strainer.

Galvanized, with Bail



	Diam. Inches	Height Inches	Length of Spout Inches	Diam. of Spout Inches	Each
No. 56 6 gals.	14 $\frac{1}{2}$	10 $\frac{1}{2}$	5 $\frac{1}{2}$	1 $\frac{1}{2}$	\$4.75
Doz...D.P.					\$94.44

Having had numerous calls for an extra large, heavy Funnel of a capacity sufficient to take a five-gallon can of gasoline at a single pouring (without having to wait for the contents to run through the chamois strainer), we designed the above Funnel and have put the same to test in a large garage for over a year. It is made of heavy steel and thoroughly galvanized after it is made up, thereby giving a durable and rustless coating.

It has a deep, large hoop for the chamois, which stretches it tight across the bottom, the full diameter of the funnel giving the maximum straining capacity and insuring a very rapid flow. This chamois is supported by a wire rack rest to prevent its sagging.

Dover Garage Pails

For washing cars and general use.

Extra Heavy



	Diam. Inches	Height Inches	Each
No. 100 10-qt., Flat Bottom	11	9	\$0.65
Per dozen...D.P.			\$12.00
No. 120 12-qt., Flat Bottom	11	10	.75
Per dozen...D.P.			\$13.32
No. 140 14-qt., Flat Bottom	12	10 $\frac{1}{2}$	.80
Per dozen...D.P.			\$14.00

This is our heaviest and strongest pail. Extra heavy body and bottom and has a heavy wrought steel hoop securely riveted on bottom.

Extra Heavy



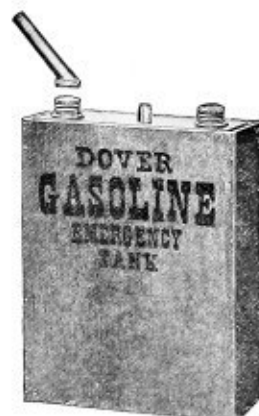
	Diam. Inches	Height Inches	Each
No. 200 12-qt.	11 $\frac{1}{2}$	10 $\frac{1}{2}$	\$0.75
Per dozen...D.P.			\$14.00
No. 400 14-qt.	11 $\frac{1}{2}$	10 $\frac{1}{2}$	.80
Per dozen...D.P.			\$15.10

Gasoline Tanks

Emergency Gasoline Tank

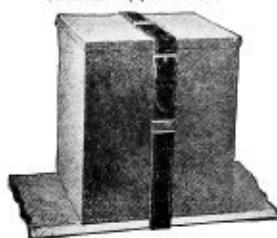
Made of steel and protected by a wood casing, nicely finished. Has a special pouring spout and a wire strainer. This tank will store one gallon of gasoline in a small space and will always furnish a full gallon of gasoline in reserve to get home with.

No. 1 8 $\frac{1}{2}$ inches wide by 3 inches thick by 12 inches high	\$1.00
Doz...D.P.	\$14.44



Dover Tourist Oil and Gasoline Kit

(Patent applied for)



A neat, compact and dust-proof device for carrying extra oil and gasoline when touring. Instantly attached and instantly detached. Furnished with strap, complete.

No. 1 8x9 in. by 10 $\frac{1}{2}$ in. high, 3 $\frac{1}{2}$ gals. capacity, each	\$4.00
Dozen...D.P.	\$80.00

Attached to running board.



MEASURES

Dover Gasoline Can



Extra heavy weight. Galvanized with blue stripes.

No. 52. 5-gal., with spout, diameter 11 $\frac{1}{4}$ -in., height 15 $\frac{1}{4}$ -in.; each\$1.50
Each.....D.P. \$2.22

New Dover Galvanized Garage Measure

The ideal 5-gallon garage measure. Extra heavy. Warranted not to break.

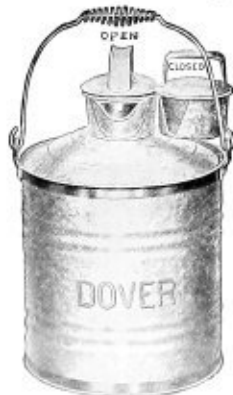
This is the most practical 5-gallon measure made, because it can be filled from a tank, hose or faucet without spattering, and when full can be carried to auto and lifted up on running board to tank without spilling a drop and can further be poured into funnel very fast without spilling.



Opening in end of spout, 1 $\frac{1}{2}$ inches
Opening in top for filling, 4 $\frac{1}{2}$ inches

No. 15. 5-gallon capacity; each\$2.00
Each.....D.P. \$3.00

Dover Non-Evaporating Gasoline Measure



The perfect 5-gallon measure. Galvanized with blue bands. 11 $\frac{1}{4}$ -in. diam. by 18-in. high, over all. 4-in. diam., filling opening.

No. 25. 5-gallon capacity with New Novel Bail; each\$2.50
Each.....D.P. \$3.77

Dover 5-Gallon Wagon Measure

The Fastest Pouring Measure Made. Made of extra heavy steel and galvanized after it is made, thereby coating every crack and crevice, making it absolutely rustless and uniting every part together.

The body and bottom are heavily re-enforced and the bails have large bosses, making them extremely easy to carry. They are designed to stand hard, every-day service. The strongest five-gallon measures ever put on the market and are used largely by gasoline dealers for wagon use. Accurate to measure and guaranteed not to leak.

No. 35. 5-gal. 10 $\frac{1}{2}$ -in. diam x 19-in. high, each.....\$5.00
6-in. diameter opening in neck.
Each.....D.P. \$8.32



Dover Storage Oil Cans



Plain Tin

No. 1. 1-gal. 5 $\frac{1}{2}$ -in. square x 10-in. high x 1-in. opening	Each
Each.....D.P. \$0.40	\$0.30
No. 5. 5-gal. 9 $\frac{1}{4}$ -in. square x 13 $\frac{1}{4}$ -in. high x 1 $\frac{1}{2}$ -in. opening	Each
Each.....D.P. \$0.77	.55

Wood Jacketed Tin Cans



	Diam.	High.	Open.	
	In.	In.	In.	Each
No. 55. 5-gal., with Wood Bail, 10 $\frac{1}{2}$ x 19 $\frac{1}{2}$ x 1 $\frac{1}{2}$				\$0.80
Each.....D.P. \$1.11				
No. 510. 10-gal., with Side Hdls., 13 $\frac{1}{2}$ x 23 $\frac{1}{2}$ x 1 $\frac{1}{2}$				1.45
Each.....D.P. \$2.00				

The above cans are well made, oil tight, and are used by dealers and garages for putting up special brands of oil.



SOAP ECONOMIZERS AND DRIP PANS

New Dover Garage Soap Economizer



Reduces soap consumption one-half. Saves all waste and prevents theft. It works on the same principle that the common soap shaker does in washing dishes. Made of heavy galvanized perforated steel.

	Capacity	Dia.	High	Price
No. 30	6½-lbs.	6½	x 8-in.	each \$1.75
Each	D.P.	\$3.00		

Simply fill the perforated pail with four to six pounds of soap, and suspend by cord, chain or other method, in water washing tank or barrel.

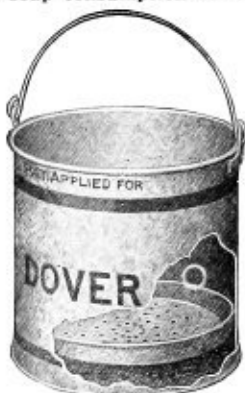
Very little agitation is required, as the numerous perforations allow perfect circulation of water.

It not only saves at least one-half the soap consumption, but absolutely prevents all unnecessary waste and petty theft, as it is intended after filling to be securely locked with a padlock, the advantages of which will appeal to every practical garage man. It was designed by a practical garage man, and tried out in the largest garage in New England.

Dover Soap Economizer

A Perfect Pail for Washing Cars

Will reduce soap consumption at least one-third



GARAGE SIZE
Height Diam.

No. 20	25-qts. Capacity,	12 -in. x 12½ -in.,	each \$2.50
Each	D.P.	\$4.22	

INDIVIDUAL SIZE

No. 40	13-qts. Capacity,	10½ -in. x 10 -in.,	each 2.00
Each	D.P.	\$3.32	

Fill the pail about one-quarter to one-third full of soap, place the perforated disc or pan on the soap with the concave surface uppermost, fill the pail with water, and use the same as an ordinary pail.

The advantages are: Economy in soap; keeps the sponge always clean, thereby saving both sponge and body of the car.

This pail was invented by a practical garage man, and has been tested most successfully in several of the largest garages.

It not only saves more than one-third of the soap consumption over an ordinary pail, but saves sponges, the varnish of the car and the time in washing.

These pails are well made of heavy steel, galvanized after they are made up, thereby coating every edge, seam and crevice, making them absolutely tight and rustless.

Dover Auto Safety Drip Pan

Made of heavy Galvanized Steel WITH RIM TURNED OVER A HEAVY ROD LEAVING TOP SURFACE OF PAN WITHOUT SEAM OR SOLDER, the only correct manner of making a Drip Pan.



Note Construction

Extra Heavy Edge Banded with Red Stripe

No. 1	Runabout, size 35x47-in.,	each \$3.00
-------	---------------------------	-------------

Each	D.P.	\$4.44
------	------	--------

No. 2	Touring Car, size 35x95-in.,	each 5.00
-------	------------------------------	-----------

Each	D.P.	\$7.77
------	------	--------

New sizes, not quite so heavy, not striped but a good serviceable pan.

No. 01	Runabout, size 29x41-in.,	each 2.00
--------	---------------------------	-----------

Each	D.P.	\$3.00
------	------	--------

No. 02	Touring Car, size 29x83-in.,	each 4.00
--------	------------------------------	-----------

Each	D.P.	\$6.00
------	------	--------

COPPER DRIP PANS

No. 3	Size 29x59-in., 16-oz., Polished,	each \$16.00
-------	-----------------------------------	--------------

Each	D.P.	\$24.00
------	------	---------

Placed on floor under auto the pan catches all oil, grease and gasoline. Easily cleaned. Keeps floor bright and clean.

This pan has no sharp edges, and when on floor, if auto is backed over edge it will not injure the tires nor injure the pan.

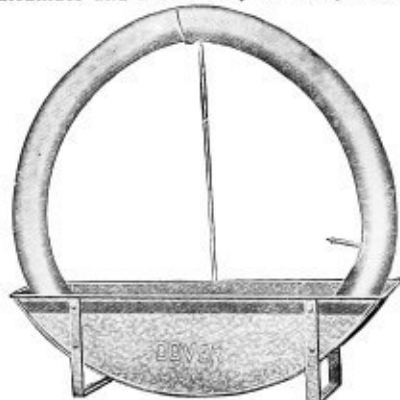
All pans are shipped securely crated.

Why All Garages and Automobiles Should Have a Drip Pan

Few automobile users appreciate the importance of keeping oil and grease from the floors of the garage over which vehicle tires are run. A tire which has seen considerable service becomes more or less porous, and will take up oil very much like a sponge. The oil being a natural solvent of rubber causes a soft spot in the tire which is allowed to stand in it, and it is but a short process of wearing away the partially dissolved rubber to cause a "flat spot." Where garage floors are more or less covered with oil, different parts of the tire are affected, with the general result that the tire wears very unevenly, and in extreme cases the user is very apt to lay the blame for its poor performance upon the tire maker.

Dover Tire Testing Pan

A Great Convenience To Every User of the Electric Vulcanizer and a Necessity to Every Garage



No. 1	30-in. long x 6-in. wide x 8-in. deep,	each \$3.00
-------	--	-------------

Each	D.P.	\$5.00
------	------	--------

Note rod which supports the tube allowing free use of both hands. This rod slides in a brass clamp, thus being adjustable to different size tire tubes.

The rod is easily removed and packed inside the pan for shipping and also occupies no space when not in use. For locating small leaks this tank is invaluable to any one who vulcanizes tires.



CAP SCREWS, ETC.

Set Screw Assortment



- No. 110 Set Screw Assortment, 14 assorted cup point set screws, U. S. standard thread, per box\$0.25
Per dozen boxes.....D.P. \$3.20

Hexagon Head Cap Screw Assortment



- No. 75 Hexagon Head Cap Screw Assortment, 12 assorted U. S. standard thread, each.....\$0.40
Per dozen boxes.....D.P. \$4.80
No. 80 Hexagon Head Cap Screw Assortment, 50 assorted U. S. standard thread, each.....1.50
Per dozen boxes.....D.P. \$20.76
No. 90 Hexagon Head Cap Screw Assortment, 12 assorted A.L.A.M. thread, each......50
Per dozen boxes.....D.P. \$6.40
No. 95 Hexagon Head Cap Screw Assortment, 50 assorted A.L.A.M. thread, each.....1.75
Per dozen boxes.....D.P. \$25.30

Taper Pin Assortment



- No. 115 Taper Pin Assortment, 40 assorted taper pins, per box\$0.50
Per dozen boxes.....D.P. \$8.00

Hexagon Nut Assortment



- No. 30 Hexagon Nut Assortment, 21 semi-finished assorted sizes, U. S. standard thread, per box.....\$0.40
Per dozen boxes.....D.P. \$4.00
No. 35 Hexagon Nut Assortment, 50 semi-finished assorted sizes, U. S. standard thread, per box......50
Per dozen boxes.....D.P. \$8.33
No. 45 Hexagon Nut Assortment, 24 semi-finished assorted sizes, A.L.A.M. thread, per box......40
Per dozen boxes.....D.P. \$4.44
No. 50 Hexagon Nut Assortment, 50 semi-finished assorted sizes, A.L.A.M. thread, per box......90
Per dozen boxes.....D.P. \$8.33

Castellated Nut Assortment



- No. 60 Castellated Nut Assortment, 15 assorted castellated nuts, U. S. standard thread, per box.....\$0.40
Per dozen boxes.....D.P. \$6.10
No. 61 Castellated Nut Assortment, 50 assorted castellated nuts, U. S. standard thread, per box.....1.25
Per dozen boxes.....D.P. \$15.98
No. 63 Castellated Nut Assortment, 15 assorted castellated nuts, A.L.A.M. thread, per box......50
Per dozen boxes.....D.P. \$7.22
No. 64 Castellated Nut Assortment, 50 assorted castellated nuts, A.L.A.M. thread, per box.....1.50
Per dozen boxes.....D.P. \$18.32

Lock Washer Assortment



- No. 120 Lock Washer Assortment, 42 assorted lock washers, per box\$0.35
Per dozen boxes.....D.P. \$3.33



SCREW ASSORTMENTS



No. 1 Wood Screw Assortment. Six dozen assorted brass wood screws. Both flat and round heads. Per box\$0.60
Dz....D.P. \$7.22



No. 4 Iron Machine Screw Assortment. Two dozen assorted iron machine screws and nuts, per box\$0.20
Dz....D.P. \$2.22

No. 2 Brass Machine Screw Assortment. Two dozen brass machine screws and nuts. Per box\$0.35
Dz....D.P. \$4.80



No. 5 Iron Bolt Assortment. One and one-half dozen assorted iron bolts and nuts, per box\$0.20
Dz....D.P. \$2.22



No. 3 Iron Wood Screw Assortment. Six dozen assorted flat and round head wood screws. Per box\$0.25
Dz....D.P. \$2.22



No. 6 Copper Rivet Assortment. Thirty assorted copper rivets and bars. Per box\$0.20
Dz....D.P. \$2.45

Cotter Pins

One hundred assorted spring cotter pins of various lengths and thicknesses. Packed in a neat enameled box, which avoids scattering about in the tool box.

"Just the thing for your tool box."
Price\$0.15
Doz....D.P. \$1.67



Campbell Lock Cotter Pins

One hundred and twenty-six assorted Campbell hammer-lock cotter pins in nickel plated screw top box.

Per box\$0.25
Per dz....D.P. \$2.89





NUTS AND CAP SCREWS

Semi-Finished Hexagon Nuts

U. S. Standard Thread

	Per 100
$\frac{1}{4}$ -20	\$2.00
Per 100, D.P. \$0.89	
5/16-18	2.50
Per 100, D.P. \$1.11	
$\frac{3}{8}$ -16	3.25
Per 100, D.P. \$1.45	
7/16-14	3.75
Per 100, D.P. \$1.67	
$\frac{1}{2}$ -12	4.50
Per 100, D.P. \$2.00	
9/16-12	5.50
Per 100, D.P. \$2.45	
$\frac{5}{8}$ -11	6.50
Per 100, D.P. \$2.89	



	Per 100
$\frac{3}{4}$ -10	\$8.50
Per 100, D.P. \$3.75	

A. L. A. M. Thread

	Per 100
$\frac{1}{4}$ -28	\$2.00
Per 100, D.P. \$0.89	
5/16-24	2.50
Per 100, D.P. \$1.11	
$\frac{3}{8}$ -24	3.25
Per 100, D.P. \$1.45	
7/16-20	3.75
Per 100, D.P. \$1.67	

	Per 100
$\frac{1}{2}$ -20	\$4.50
Per 100, D.P. \$2.00	
9/16-18	5.50
Per 100, D.P. \$2.45	
$\frac{5}{8}$ -18	6.50
Per 100, D.P. \$2.89	
$\frac{3}{4}$ -16	8.50
Per 100, D.P. \$3.75	

Castellated Nuts

U. S. Standard Thread



	Per 100
$\frac{1}{4}$ -20	\$2.00
Per 100, D.P. \$1.22	
5/16-18	2.50
Per 100, D.P. \$1.45	
$\frac{3}{8}$ -16	3.25
Per 100, D.P. \$1.89	
7/16-14	3.75
Per 100, D.P. \$2.56	
$\frac{1}{2}$ -12	4.50
Per 100, D.P. \$3.11	
9/16-11	5.50
Per 100, D.P. \$4.44	
$\frac{5}{8}$ -11	6.50
Per 100, D.P. \$5.55	

A. L. A. M. Thread

	Per 100
$\frac{1}{4}$ -28	\$2.00
Per 100, D.P. \$1.22	
5/16-24	2.50
Per 100, D.P. \$1.45	
$\frac{3}{8}$ -24	3.25
Per 100, D.P. \$1.89	
7/16-20	3.75
Per 100, D.P. \$2.56	

	Per 100
$\frac{1}{2}$ -20	\$4.50
Per 100, D.P. \$3.11	
9/16-18	5.50
Per 100, D.P. \$4.44	
$\frac{5}{8}$ -18	6.50
Per 100, D.P. \$5.55	

Hexagon Head Cap Screws



U. S. Standard Thread

	Per 100
$\frac{1}{4}$ x $\frac{3}{4}$	\$3.00
Per 100, D.P. \$1.67	
$\frac{1}{4}$ x1	3.25
Per 100, D.P. \$1.89	
$\frac{1}{2}$ x $\frac{1}{2}$	3.50
Per 100, D.P. \$2.00	
$\frac{1}{2}$ x $\frac{3}{4}$	3.75
Per 100, D.P. \$2.11	
$\frac{3}{4}$ x $\frac{1}{2}$	4.00
Per 100, D.P. \$2.27	
$\frac{3}{4}$ x1	4.25
Per 100, D.P. \$2.40	
5/16x $\frac{3}{4}$	3.25
Per 100, D.P. \$1.87	
5/16x1	3.50
Per 100, D.P. \$2.00	
5/16x $\frac{1}{2}$	3.75
Per 100, D.P. \$2.11	
5/16x $\frac{3}{4}$	4.00
Per 100, D.P. \$2.27	

	Per 100
5/16x $\frac{1}{2}$	\$4.25
Per 100, D.P. \$2.40	
5/16x2	4.85
Per 100, D.P. \$2.71	
$\frac{3}{8}$ x $\frac{3}{4}$	3.75
Per 100, D.P. \$2.11	
$\frac{3}{8}$ x1	4.00
Per 100, D.P. \$2.27	
$\frac{3}{8}$ x $\frac{1}{2}$	4.25
Per 100, D.P. \$2.40	
$\frac{3}{8}$ x $\frac{3}{4}$	4.50
Per 100, D.P. \$2.53	
$\frac{3}{8}$ x1 $\frac{1}{2}$	4.85
Per 100, D.P. \$2.71	
$\frac{3}{8}$ x2	5.20
Per 100, D.P. \$2.89	
$\frac{3}{8}$ x $\frac{3}{4}$	5.55
Per 100, D.P. \$3.11	
$\frac{3}{8}$ x $\frac{1}{2}$	6.00
Per 100, D.P. \$3.33	

Hexagon Head Cap Screws—Continued

U. S. Standard Thread

	Per 100		Per 100
7/16x1	4.90	$\frac{1}{2}$ x3	\$10.70
Per 100, D.P. \$2.78		Per 100, D.P. \$6.00	
7/16x $\frac{1}{2}$	5.30	9/16x $\frac{1}{2}$	9.50
Per 100, D.P. \$3.00		Per 100, D.P. \$5.33	
7/16x $\frac{3}{4}$	5.70	9/16x $\frac{3}{4}$	10.90
Per 100, D.P. \$3.22		Per 100, D.P. \$5.60	
7/16x1 $\frac{1}{2}$	6.10	9/16x1 $\frac{1}{2}$	10.75
Per 100, D.P. \$3.44		Per 100, D.P. \$6.00	
7/16x2	6.50	9/16x2	11.50
Per 100, D.P. \$3.67		Per 100, D.P. \$6.40	
7/16x $\frac{3}{4}$	7.15	9/16x $\frac{3}{4}$	12.60
Per 100, D.P. \$4.00		Per 100, D.P. \$7.00	
7/16x1 $\frac{3}{4}$	7.50	9/16x2 $\frac{1}{2}$	13.60
Per 100, D.P. \$4.22		Per 100, D.P. \$7.55	
7/16x2 $\frac{1}{2}$	7.90	9/16x2 $\frac{3}{4}$	14.40
Per 100, D.P. \$4.44		Per 100, D.P. \$8.00	
7/16x3	8.40	9/16x3	15.20
Per 100, D.P. \$4.66		Per 100, D.P. \$8.44	
$\frac{1}{2}$ -1	5.90	$\frac{5}{8}$ x $\frac{1}{4}$	9.50
Per 100, D.P. \$3.33		Per 100, D.P. \$5.33	
$\frac{1}{2}$ x $\frac{1}{4}$	6.50	$\frac{5}{8}$ x $\frac{1}{2}$	10.00
Per 100, D.P. \$3.67		Per 100, D.P. \$5.60	
$\frac{1}{2}$ x $\frac{1}{2}$	7.10	$\frac{5}{8}$ x $\frac{3}{4}$	10.75
Per 100, D.P. \$4.00		Per 100, D.P. \$6.00	
$\frac{1}{2}$ x $\frac{3}{4}$	7.70	$\frac{5}{8}$ x2	11.50
Per 100, D.P. \$4.33		Per 100, D.P. \$6.40	
$\frac{1}{2}$ x2	8.30	$\frac{5}{8}$ x $\frac{1}{2}$	12.60
Per 100, D.P. \$4.66		Per 100, D.P. \$7.00	
$\frac{1}{2}$ x $\frac{3}{4}$	8.90	$\frac{5}{8}$ x $\frac{3}{4}$	13.60
Per 100, D.P. \$5.00		Per 100, D.P. \$7.55	
$\frac{1}{2}$ x2 $\frac{1}{2}$	9.50	$\frac{5}{8}$ x2 $\frac{1}{2}$	14.40
Per 100, D.P. \$5.33		Per 100, D.P. \$8.00	
$\frac{1}{2}$ x2 $\frac{3}{4}$	10.10	$\frac{5}{8}$ x3	15.20
Per 100, D.P. \$5.66		Per 100, D.P. \$8.44	

Hexagon Head Cap Screws

A. L. A. M. Thread

	Per 100		Per 100
$\frac{1}{4}$ x $\frac{3}{4}$	\$3.45	7/16x $\frac{3}{4}$	\$10.95
Per 100, D.P. \$1.96		Per 100, D.P. \$5.66	
$\frac{1}{4}$ x1	3.85	7/16x2 $\frac{1}{2}$	10.65
Per 100, D.P. \$2.22		Per 100, D.P. \$5.95	
$\frac{1}{2}$ x $\frac{1}{2}$	4.10	7/16x2 $\frac{3}{4}$	11.25
Per 100, D.P. \$2.33		Per 100, D.P. \$6.26	
$\frac{1}{2}$ x $\frac{3}{4}$	4.40	7/16x3	11.95
Per 100, D.P. \$2.45		Per 100, D.P. \$6.66	
$\frac{1}{2}$ x1 $\frac{1}{2}$	4.70	$\frac{1}{2}$ -1	7.40
Per 100, D.P. \$2.67		Per 100, D.P. \$4.13	
$\frac{1}{2}$ x2	5.00	$\frac{1}{2}$ x $\frac{1}{4}$	8.15
Per 100, D.P. \$2.80		Per 100, D.P. \$4.53	
5/16x $\frac{3}{4}$	4.10	$\frac{1}{2}$ x $\frac{1}{2}$	8.90
Per 100, D.P. \$2.33		Per 100, D.P. \$5.00	
5/16x1	4.50	$\frac{1}{2}$ x $\frac{3}{4}$	9.65
Per 100, D.P. \$2.53		Per 100, D.P. \$5.38	
5/16x $\frac{1}{2}$	4.80	$\frac{1}{2}$ x2	10.40
Per 100, D.P. \$2.67		Per 100, D.P. \$5.82	
5/16x $\frac{3}{4}$	5.10	$\frac{1}{2}$ x2 $\frac{1}{2}$	11.15
Per 100, D.P. \$2.80		Per 100, D.P. \$6.22	
5/16x1 $\frac{1}{2}$	5.45	$\frac{1}{2}$ x2 $\frac{3}{4}$	11.90
Per 100, D.P. \$3.04		Per 100, D.P. \$6.66	
5/16x2	6.05	$\frac{1}{2}$ x2 $\frac{1}{2}$	12.60
Per 100, D.P. \$3.38		Per 100, D.P. \$7.00	
5/16x2 $\frac{1}{2}$	6.70	$\frac{1}{2}$ x3	13.40
Per 100, D.P. \$3.78		Per 100, D.P. \$7.55	
5/16x2 $\frac{3}{4}$	7.25	9/16x $\frac{1}{2}$	11.90
Per 100, D.P. \$4.04		Per 100, D.P. \$6.66	
$\frac{3}{8}$ x $\frac{3}{4}$	4.70	9/16x $\frac{3}{4}$	12.50
Per 100, D.P. \$2.67		Per 100, D.P. \$7.60	
$\frac{3}{8}$ x1	5.10	9/16x1 $\frac{1}{2}$	13.45
Per 100, D.P. \$2.80		Per 100, D.P. \$7.55	
$\frac{3}{8}$ x $\frac{1}{2}$	5.35	9/16x2	14.40
Per 100, D.P. \$3.00		Per 100, D.P. \$8.00	
$\frac{3}{8}$ x $\frac{3}{4}$	5.65	9/16x2 $\frac{1}{2}$	15.75
Per 100, D.P. \$3.22		Per 100, D.P. \$8.88	
$\frac{3}{8}$ x1 $\frac{1}{2}$	6.05	9/16x2 $\frac{3}{4}$	17.00
Per 100, D.P. \$3.38		Per 100, D.P. \$9.46	
$\frac{3}{8}$ x2	6.50	9/16x3	18.00
Per 100, D.P. \$3.67		Per 100, D.P. \$10.00	
$\frac{3}{8}$ x2 $\frac{1}{2}$	6.95	Per 100, D.P. \$10.55	
Per 100, D.P. \$3.87		$\frac{5}{8}$ x $\frac{1}{4}$	15.80
$\frac{3}{8}$ x2 $\frac{3}{4}$	7.50	Per 100, D.P. \$8.88	
Per 100, D.P. \$4.18		$\frac{5}{8}$ x2	16.90
7/16x1	6.80	Per 100, D.P. \$9.44	
Per 100, D.P. \$3.80		$\frac{5}{8}$ x2 $\frac{1}{2}$	18.20
7/16x $\frac{1}{2}$	7.35	Per 100, D.P. \$10.10	
Per 100, D.P. \$4.11		$\frac{5}{8}$ x2 $\frac{3}{4}$	19.45
7/16x $\frac{3}{4}$	8.00	Per 100, D.P. \$10.88	
Per 100, D.P. \$4.44		$\frac{5}{8}$ x2 $\frac{1}{2}$	20.90
7/16x1 $\frac{1}{2}$	8.65	Per 100, D.P. \$11.66	
Per 100, D.P. \$4.80		$\frac{5}{8}$ x3	22.40
7/16x2	9.25	Per 100, D.P. \$12.66	
Per 100, D.P. \$5.18			



SET SCREWS, TAPER PINS, WASHERS AND STOVE BOLTS

Cup Point Set Screws



	Per 100		Per 100
$\frac{1}{4} \times \frac{1}{2}$	\$1.80	$\frac{3}{8} \times \frac{3}{4}$	\$2.60
Per 100...D.P. \$0.80		Per 100...D.P. \$1.38	
$\frac{1}{4} \times \frac{3}{8}$	1.90	$\frac{3}{8} \times 1$	2.65
Per 100...D.P. \$1.00		Per 100...D.P. \$1.42	
$\frac{1}{4} \times \frac{1}{2}$	2.00	$\frac{3}{8} \times 1\frac{1}{4}$	2.85
Per 100...D.P. \$1.00		Per 100...D.P. \$1.45	
$\frac{1}{4} \times \frac{3}{4}$	2.10	$\frac{3}{8} \times 1\frac{1}{2}$	3.10
Per 100...D.P. \$1.02		Per 100...D.P. \$1.60	
$\frac{1}{4} \times 1$	2.15	$\frac{7}{16} \times \frac{5}{8}$	2.80
Per 100...D.P. \$1.07		Per 100...D.P. \$1.45	
$\frac{1}{4} \times 1\frac{1}{4}$	2.30	$\frac{7}{16} \times \frac{3}{4}$	2.90
Per 100...D.P. \$1.22		Per 100...D.P. \$1.51	
$\frac{1}{4} \times 1\frac{1}{2}$	2.50	$\frac{7}{16} \times \frac{7}{8}$	3.00
Per 100...D.P. \$1.33		Per 100...D.P. \$1.56	
$\frac{5}{16} \times \frac{1}{2}$	2.00	$\frac{7}{16} \times 1$	3.10
Per 100...D.P. \$1.00		Per 100...D.P. \$1.60	
$\frac{5}{16} \times \frac{3}{8}$	2.10	$\frac{7}{16} \times 1\frac{1}{4}$	3.50
Per 100...D.P. \$1.07		Per 100...D.P. \$1.78	
$\frac{5}{16} \times \frac{1}{2}$	2.20	$\frac{7}{16} \times 1\frac{1}{2}$	4.00
Per 100...D.P. \$1.11		Per 100...D.P. \$2.00	
$\frac{5}{16} \times \frac{3}{4}$	2.30	$\frac{1}{2} \times \frac{5}{8}$	3.30
Per 100...D.P. \$1.16		Per 100...D.P. \$1.67	
$\frac{5}{16} \times 1$	2.35	$\frac{1}{2} \times \frac{3}{4}$	3.40
Per 100...D.P. \$1.22		Per 100...D.P. \$1.69	
$\frac{5}{16} \times 1\frac{1}{4}$	2.50	$\frac{1}{2} \times \frac{7}{8}$	3.60
Per 100...D.P. \$1.29		Per 100...D.P. \$1.82	
$\frac{5}{16} \times 1\frac{1}{2}$	2.70	$\frac{1}{2} \times 1$	3.80
Per 100...D.P. \$1.38		Per 100...D.P. \$1.96	
$\frac{3}{8} \times \frac{1}{2}$	2.35	$\frac{1}{2} \times 1\frac{1}{4}$	4.30
Per 100...D.P. \$1.22		Per 100...D.P. \$2.22	
$\frac{3}{8} \times \frac{3}{8}$	2.45	$\frac{1}{2} \times 1\frac{1}{2}$	4.80
Per 100...D.P. \$1.29		Per 100...D.P. \$2.45	
$\frac{3}{8} \times \frac{1}{2}$	2.50		
Per 100...D.P. \$1.33			

Taper Pins



Taper Pins	Per 100	Taper Pins	Per 100
$\frac{1}{4}$ No. 1	\$2.00	$\frac{1}{4}$ No. 5	\$2.75
Per 100...D.P. \$1.11		Per 100...D.P. \$1.56	
$\frac{1}{4}$ No. 1	2.25	$\frac{1}{4}$ No. 5	3.00
Per 100...D.P. \$1.25		Per 100...D.P. \$1.69	
$\frac{1}{4}$ No. 1	2.50	$\frac{1}{4}$ No. 5	3.25
Per 100...D.P. \$1.42		Per 100...D.P. \$1.82	
$\frac{3}{8}$ No. 2	2.10	$\frac{1}{4}$ No. 5	3.50
Per 100...D.P. \$1.16		Per 100...D.P. \$1.96	
$\frac{1}{4}$ No. 2	2.35	$\frac{1}{4}$ No. 5	3.75
Per 100...D.P. \$1.33		Per 100...D.P. \$2.09	
$\frac{1}{4}$ No. 2	2.60	$\frac{1}{4}$ No. 5	4.00
Per 100...D.P. \$1.47		Per 100...D.P. \$2.22	
$\frac{1}{4}$ No. 2	2.85	$\frac{1}{4}$ No. 5	4.40
Per 100...D.P. \$1.60		Per 100...D.P. \$2.45	
$\frac{3}{8}$ No. 3	2.30	$\frac{1}{4}$ No. 6	3.00
Per 100...D.P. \$1.33		Per 100...D.P. \$1.69	
$\frac{1}{4}$ No. 3	2.55	$\frac{1}{4}$ No. 6	3.25
Per 100...D.P. \$1.42		Per 100...D.P. \$1.82	
$\frac{1}{4}$ No. 3	2.80	$\frac{1}{4}$ No. 6	3.50
Per 100...D.P. \$1.56		Per 100...D.P. \$1.96	
$\frac{1}{4}$ No. 3	3.05	$\frac{1}{4}$ No. 6	3.75
Per 100...D.P. \$1.69		Per 100...D.P. \$2.09	
$\frac{1}{4}$ No. 3	3.30	$\frac{1}{4}$ No. 6	4.00
Per 100...D.P. \$1.87		Per 100...D.P. \$2.22	
$\frac{3}{8}$ No. 4	2.50	$\frac{1}{4}$ No. 6	4.35
Per 100...D.P. \$1.42		Per 100...D.P. \$2.45	
$\frac{1}{4}$ No. 4	2.75	$\frac{1}{4}$ No. 6	4.75
Per 100...D.P. \$1.56		Per 100...D.P. \$2.67	
$\frac{1}{4}$ No. 4	3.00	$\frac{1}{4}$ No. 6	5.20
Per 100...D.P. \$1.69		Per 100...D.P. \$2.87	
$\frac{1}{4}$ No. 4	3.25	$\frac{1}{4}$ No. 6	5.70
Per 100...D.P. \$1.82		Per 100...D.P. \$3.20	
$\frac{1}{4}$ No. 4	3.50	$\frac{1}{4}$ No. 6	6.25
Per 100...D.P. \$1.96		Per 100...D.P. \$3.90	
$\frac{1}{4}$ No. 4	3.75		
Per 100...D.P. \$2.09			

Lock Washers



(Lock Washers, Packed in Boxes of 250.)

Lock Washers for $\frac{3}{16}$ bolt, per 100	\$0.75
Per 100...D.P. \$0.34	
Lock Washers for $\frac{1}{4}$ bolt, per 100	.80
Per 100...D.P. \$0.40	
Lock Washers for $\frac{5}{16}$ bolt, per 100	.90
Per 100...D.P. \$0.49	
Lock Washers for $\frac{3}{8}$ bolt, per 100	.95
Per 100...D.P. \$0.56	
Lock Washers for $\frac{7}{16}$ bolt, per 100	1.00
Per 100...D.P. \$0.67	
Lock Washers for $\frac{1}{2}$ bolt, per 100	1.10
Per 100...D.P. \$0.78	
Lock Washers for $\frac{9}{16}$ bolt, per 100	1.20
Per 100...D.P. \$0.89	
Lock Washers for $\frac{5}{8}$ bolt, per 100	1.30
Per 100...D.P. \$1.00	
Per box of 250...D.P. \$2.00	

Wrought Iron Washers



	Per Lb.
Iron Washers for $\frac{3}{16}$ bolt	\$0.20
Per lb...D.P. \$0.27	
Iron Washers for $\frac{1}{4}$ bolt	.20
Per lb...D.P. \$0.20	
Iron Washers for $\frac{5}{16}$ bolt	.18
Per lb...D.P. \$0.18	
Iron Washers for $\frac{3}{8}$ bolt	.18
Per lb...D.P. \$0.18	
Iron Washers for $\frac{7}{16}$ bolt	.15
Per lb...D.P. \$0.16	
Iron Washers for $\frac{1}{2}$ bolt	.15
Per lb...D.P. \$0.16	
Iron Washers for $\frac{9}{16}$ bolt	.13
Per lb...D.P. \$0.16	
Iron Washers for $\frac{5}{8}$ bolt	.13
Per lb...D.P. \$0.14	

Stove Bolts



Flat Head



Round Head

	Per 100		Per 100
$\frac{3}{16} \times \frac{3}{4}$	\$0.85	$\frac{3}{16} \times \frac{3}{4}$	\$0.85
Per 100...D.P. \$0.45		Per 100...D.P. \$0.45	
$\frac{3}{16} \times 1$	.90	$\frac{3}{16} \times 1$	.90
Per 100...D.P. \$0.47		Per 100...D.P. \$0.47	
$\frac{3}{16} \times 1\frac{1}{4}$	1.00	$\frac{3}{16} \times 1\frac{1}{4}$	1.00
Per 100...D.P. \$0.49		Per 100...D.P. \$0.49	
$\frac{3}{16} \times 1\frac{1}{2}$	1.10	$\frac{3}{16} \times 1\frac{1}{2}$	1.10
Per 100...D.P. \$0.54		Per 100...D.P. \$0.54	
$\frac{3}{16} \times 1\frac{3}{4}$	1.15	$\frac{3}{16} \times 1\frac{3}{4}$	1.15
Per 100...D.P. \$0.58		Per 100...D.P. \$0.58	
$\frac{3}{16} \times 2$	1.20	$\frac{3}{16} \times 2$	1.20
Per 100...D.P. \$0.62		Per 100...D.P. \$0.62	
$\frac{1}{4} \times \frac{3}{4}$	1.20	$\frac{1}{4} \times \frac{3}{4}$	1.20
Per 100...D.P. \$0.62		Per 100...D.P. \$0.62	
$\frac{1}{4} \times 1$	1.30	$\frac{1}{4} \times 1$	1.30
Per 100...D.P. \$0.67		Per 100...D.P. \$0.67	
$\frac{1}{4} \times 1\frac{1}{4}$	1.40	$\frac{1}{4} \times 1\frac{1}{4}$	1.40
Per 100...D.P. \$0.71		Per 100...D.P. \$0.71	
$\frac{1}{4} \times 1\frac{1}{2}$	1.50	$\frac{1}{4} \times 1\frac{1}{2}$	1.50
Per 100...D.P. \$0.76		Per 100...D.P. \$0.76	
$\frac{1}{4} \times 1\frac{3}{4}$	1.55	$\frac{1}{4} \times 1\frac{3}{4}$	1.55
Per 100...D.P. \$0.76		Per 100...D.P. \$0.76	
$\frac{1}{4} \times 2$	1.60	$\frac{1}{4} \times 2$	1.60
Per 100...D.P. \$0.80		Per 100...D.P. \$0.80	



SCREWS, NUTS, CASES AND COTTER PINS

Machine Screws

Flat and Round Head Machine Screws



Numbers	6	8	10	12	14	16
Threads	32	32	32	24	20	18

Length Under Heads						
$\frac{1}{2}$	Per Gross, D.P.	\$0.39	\$0.48	\$0.70	\$0.80	\$1.20
$\frac{3}{8}$	Per Gross, D.P.	.42	.52	.75	.85	1.00
$\frac{1}{2}$	Per Gross, D.P.	.46	.56	.80	.90	1.05
$\frac{3}{4}$	Per Gross, D.P.	.50	.60	.85	.95	1.15
1	Per Gross, D.P.	.55	.65	.90	1.00	1.25
$1\frac{1}{4}$	Per Gross, D.P.	.65	.75	1.10	1.20	1.45
$1\frac{1}{2}$	Per Gross, D.P.	.75	.85	1.30	1.40	1.65
$1\frac{3}{4}$	Per Gross, D.P.	.85	1.05	1.50	1.60	1.85
2	Per Gross, D.P.	1.15	1.25	1.70	1.80	2.20

Hex Machine Screw Nut



Semi-finished Iron

Nos. Size Screw	Threads Per Inch	Price
6	32	Per Gross, D.P. \$0.25
8	32	Per Gross, D.P. .28
10	24 and 32	Per Gross, D.P. .30
12	24	Per Gross, D.P. .33
14	20	Per Gross, D.P. .38
16	18	Per Gross, D.P. .50

Bolt and Screw Cases

Revolving Cases



Poplar Wood Cases—Cherry Stained

No. 10 Case, 72 drawers, height 33 inches, width 21 inches, with knobs, each.....	\$33.00
Each, D.P.	\$54.95
With knobs and label holders, each.....	37.50
Each, D.P.	\$62.43
No. 12 Case, 80 drawers, height 36 inches, width 21 inches, with knobs, each.....	37.50
Each, D.P.	\$62.43
With knobs and label holders, each.....	40.50
Each, D.P.	\$67.45
No. 14 Case, 88 drawers, height 39 inches, width 24 inches, with knobs, each.....	42.00
Each, D.P.	\$69.93
With knobs and label holders, each.....	44.25
Each, D.P.	\$73.68
No. 16 Case, 96 drawers, height 42 inches, width 24 inches, with knobs, each.....	46.00
Each, D.P.	\$76.59
With knobs and label holders, each.....	49.00
Each, D.P.	\$81.59
No. 18 Case in oak, with knobs and label holders, each.....	44.00
Each, D.P.	\$73.26
No. 12 Case in oak, with knobs and label holders, each.....	48.00
Each, D.P.	\$79.92
No. 14 Case in oak, with knobs and label holders, each.....	55.00
Each, D.P.	\$91.58
No. 16 Case in oak, with knobs and label holders, each.....	71.50
Each, D.P.	\$119.61

Cotter Pins



Cotter Pins in bulk, packed in boxes of 500 and 1,000.

Inches	Per M.	Inches	Per M.
$1/16 \times \frac{3}{4}$	\$0.75	$\frac{1}{8} \times 1\frac{1}{2}$	\$1.75
Per M., D.P.	\$0.67	Per M., D.P.	\$1.40
$1/16 \times 1$	.80	$\frac{1}{8} \times 1\frac{3}{4}$	1.85
Per M., D.P.	\$0.78	Per M., D.P.	\$1.51
$1/16 \times 1\frac{1}{4}$	1.00	$\frac{1}{8} \times 2$	2.00
Per M., D.P.	\$0.89	Per M., D.P.	\$1.67
$1/16 \times 1\frac{1}{2}$	1.20	$9/64 \times 1\frac{1}{4}$	1.80
Per M., D.P.	\$1.00	Per M., D.P.	\$1.45
$3/32 \times \frac{3}{4}$	.90	$9/64 \times 1\frac{1}{2}$	2.00
Per M., D.P.	\$0.67	Per M., D.P.	\$1.67
$3/32 \times 1$	1.00	$9/64 \times 1\frac{3}{4}$	2.20
Per M., D.P.	\$0.78	Per M., D.P.	\$1.78
$3/32 \times 1\frac{1}{4}$	1.10	$9/64 \times 2$	2.40
Per M., D.P.	\$0.89	Per M., D.P.	\$1.96
$3/32 \times 1\frac{1}{2}$	1.20	$5/32 \times 1\frac{1}{4}$	2.10
Per M., D.P.	\$1.00	Per M., D.P.	\$1.74
$3/32 \times 1\frac{3}{4}$	1.40	$5/32 \times 1\frac{1}{2}$	2.30
Per M., D.P.	\$1.11	Per M., D.P.	\$1.89
$3/32 \times 2$	1.50	$5/32 \times 1\frac{3}{4}$	2.50
Per M., D.P.	\$1.29	Per M., D.P.	\$2.11
$7/64 \times 1$	1.10	$5/32 \times 2$	2.80
Per M., D.P.	\$0.89	Per M., D.P.	\$2.33
$7/64 \times 1\frac{1}{4}$	1.20	$3/16 \times 1\frac{1}{4}$	2.75
Per M., D.P.	\$1.07	Per M., D.P.	\$2.45
$7/64 \times 1\frac{1}{2}$	1.40	$3/16 \times 1\frac{1}{2}$	3.00
Per M., D.P.	\$1.16	Per M., D.P.	\$2.67
$7/64 \times 1\frac{3}{4}$	1.50	$3/16 \times 1\frac{3}{4}$	3.40
Per M., D.P.	\$1.29	Per M., D.P.	\$2.78
$7/64 \times 2$	1.70	$3/16 \times 2$	3.70
Per M., D.P.	\$1.49	Per M., D.P.	\$3.11
$\frac{1}{8} \times 1\frac{1}{4}$	1.50		
Per M., D.P.	\$1.22		

Campbell Hammer-Lock Cotter Pins



PATD. MARCH 1912

	Inches	Per M.
Campbell Cotter Pins.....	$1/16 \times 1$	\$4.80
Per M., D.P.		\$1.60
Campbell Cotter Pins.....	$1/16 \times 1\frac{1}{4}$	5.45
Per M., D.P.		\$1.11
Campbell Cotter Pins.....	$1/16 \times 1\frac{1}{2}$	6.10
Per M., D.P.		\$1.22
Campbell Cotter Pins.....	$3/32 \times 1$	4.80
Per M., D.P.		\$1.00
Campbell Cotter Pins.....	$3/32 \times 1\frac{1}{4}$	5.45
Per M., D.P.		\$1.11
Campbell Cotter Pins.....	$3/32 \times 1\frac{1}{2}$	6.10
Per M., D.P.		\$1.22
Campbell Cotter Pins.....	$3/32 \times 1\frac{3}{4}$	6.75
Per M., D.P.		\$1.45
Campbell Cotter Pins.....	$3/32 \times 2$	7.40
Per M., D.P.		\$1.51
Campbell Cotter Pins.....	$\frac{1}{8} \times 1$	6.70
Per M., D.P.		\$1.34
Campbell Cotter Pins.....	$\frac{1}{8} \times 1\frac{1}{4}$	7.55
Per M., D.P.		\$1.51
Campbell Cotter Pins.....	$\frac{1}{8} \times 1\frac{1}{2}$	8.40
Per M., D.P.		\$1.73
Campbell Cotter Pins.....	$\frac{1}{8} \times 1\frac{3}{4}$	9.25
Per M., D.P.		\$1.89
Campbell Cotter Pins.....	$\frac{1}{8} \times 2$	10.10
Per M., D.P.		\$2.05
Campbell Cotter Pins.....	$5/32 \times 1$	9.30
Per M., D.P.		\$1.96
Campbell Cotter Pins.....	$5/32 \times 1\frac{1}{4}$	10.45
Per M., D.P.		\$2.00
Campbell Cotter Pins.....	$5/32 \times 1\frac{1}{2}$	11.00
Per M., D.P.		\$2.33
Campbell Cotter Pins.....	$5/32 \times 1\frac{3}{4}$	12.75
Per M., D.P.		\$2.56
Campbell Cotter Pins.....	$5/32 \times 2$	13.90
Per M., D.P.		\$2.78



WHEEL PULLERS

New Model Crane Wheel Puller



For removing auto wheels, fly-wheels, transmission and cam shaft gears, commutators, sprockets, collars, pulleys, propellers, couplings, etc. The point of the screw is flat with inserted tempered tool steel point. Will not spread centers. Works equally well on work without centers. The strain is taken on the flat point of screw. Grease to keep from cutting. All Pullers are furnished with two sets of the new combination hook and extension arms.

No. 2 Combination Arms are 6 inches; No. 3, 7 inches, center to center of holes.

No. 2 Puller will reach work 11 inches from end of shaft and 16 inches in diameter.

No. 3 Puller will reach work 13 inches from end of shaft and 20 inches in diameter.

Any number of combination arms may be used as extension arms to reach work, whatever the distance from end of shaft.

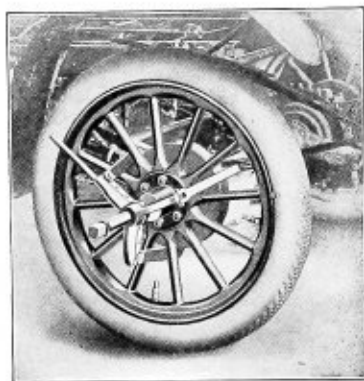
No. 2 Two Arm Crane Puller with two sets combination arms, each.....\$7.20

Each.....D.P. \$11.99

No. 3 Two Arm Crane Puller with two sets combination arms, each.....9.00

Each.....D.P. \$14.99

Three Arm Crane Puller

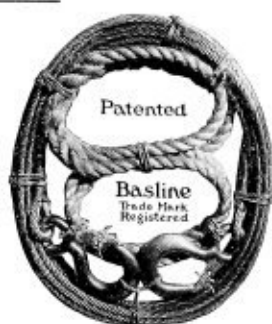


No. 2 Three Arm Crane Puller with two sets combination arms, each.....\$9.60

Each.....D.P. \$15.99

No. 3 Three Arm Crane Puller with two sets combination arms, each.....12.00

Each.....D.P. \$19.98



Basline Autowline

A "Basline Autowline" is a $\frac{3}{8}$ -inch wire rope, thirty feet long, especially constructed for towing autos.

This wonderful little towing line is manufactured of high-grade steel, $\frac{3}{8}$ -inch in diameter, about thirty feet long, over all. It has an approximate strength of 7,000 pounds. This "over all" length includes two $\frac{1}{2}$ -inch manila rope slings, which are joined to each end.

These slings make it possible to attach a stalled car to another car or anything else in less than one minute. The strain on these slings, if doubled, is taken by four pieces of $\frac{1}{2}$ -inch manila rope, giving an approximate strength of 9,600 pounds.

No safe and sane auto owner should even think of going around the block without an Autowline under the cushion—ready for any emergency.

Weights only six pounds. Coils up under a cushion.

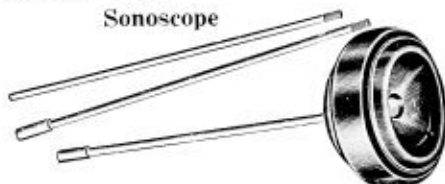
Each.....\$3.95

Each.....D.P. \$6.88

Truck Basline Autowline, much heavier than standard, having breaking strain of about 12 tons, each.....\$6.50

Each.....D.P. \$11.99

Sonoscope



Taking a motor apart is a costly piece of work and often much labor and expense could be saved if the cause could be accurately located before the parts are disturbed; in fact the knock is not always in the motor itself, although it may sound so, but may be found in some of its attachments or fittings, and could perhaps be easily remedied by the operator if he only had the means of locating it.

The "American" Sonoscope is an instrument which has been designed expressly for locating these knocks and pounds, and to say it does its work well does not begin to express it. Every click, knock or pound can be instantly traced to its source, and positively located without any mistake.

Sonoscope, each.....\$1.50

Each.....D.P. \$1.67

Water Circulating Pumps

The Lobee Pumps have a train of satisfied users everywhere—are the most universally endorsed of any pump made. If you want good circulation on your automobile, launch or motor boat, use a Lobee Pump. There are more Lobee Circulating Pumps in use than all other makes combined, which demonstrates their efficiency and durability. These gear pumps will make as good as 100 revolutions per minute.

Lobee Pumps, $\frac{1}{2}$ inch, each.....\$4.50

Each.....D.P. \$8.00

Lobee Pumps, $\frac{3}{4}$ inch, each.....6.00

Each.....D.P. \$10.66



There's no leak proof ring but the **LEAK-PROOF** Ring — insist



This is the **LEAK-PROOF** PISTON RING

MADE BY MCQUAY-NORRIS MFG. CO.

HERE'S WHAT IT DOES

It maintains the full power of the motor by checking the escape of gas during compression and by securing the application of the whole power impulse to the piston head. It reduces carbonization to a minimum because perfect compression is necessary to complete combustion of the fuel charge, and partially burned gas makes carbon deposit. It also prevents surplus oil from working up into the combustion chamber and being burned there, which is another cause of carbon deposit. It saves excessive motor wear by preventing deterioration of lubricating oil that results from condensed gasoline vapor getting down into the crank case.



AND HOW IT DOES IT

The Ring is made of two concentric "L" shaped sections, each of equal strength and closely fitted one around the other. Opposite centres of expansion in each section allow the ring to secure equal tension all round, while the flange of each section seals the expansion opening in the other. This is **LEAK-PROOF** individuality—the patented feature—and ensures a condition of perfect gas-tightness. It gives the ring unusual strength and does away with the necessity of using any coupling device. The ring is made of special Processed Gray Iron, tough, smooth and of lasting elasticity. Every one is carefully tested and exactly finished—perfect fit and adjustment are always secured and much cylinder wear eliminated.

WHERE IT CAN BE USED

The use of the **LEAK-PROOF** Piston Ring is not confined to the gasoline motor. Wherever compression is required or the conservation of power impulse sought for it will prove itself to be perfectly and permanently efficient. Therefore, it should be used in:

Automobiles
Motor Boats
Motorcycles
Aeroplanes
Farm Engines
(stationary, portable
and tractor)



"Ask the User"

Steam Engines
Air Compressors
Pumps (all kinds)
Refrigerating and
Ice Making Machines
Lungmotors

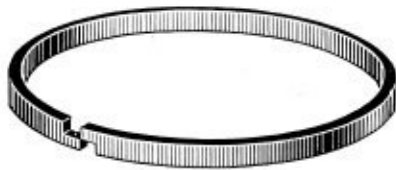
PRICE LIST OF LEAK-PROOF PISTON RINGS

Three-sixteenths, One-fourth or Five-sixteenths Inches Wide

Diam.	Price Each	Diam.	Price Each	Diam.	Price Each	Diam.	Price Each	Diam.	Price Each	Diam.	Price Each	Diam.	Price Each
3 3/8	\$1.75	3 3/4	\$1.75	3 7/8	\$2.00	4 1/8	\$2.00	4 1/4	\$2.00	4 1/2	\$2.25	4 3/4	\$2.50
4 1/2	1.75	4 3/4	1.75	4 7/8	2.00	5 1/8	2.00	5 1/4	2.00	5 1/2	2.25	5 3/4	2.50
5 3/8	1.75	5 3/4	1.75	5 7/8	2.00	6 1/8	2.00	6 1/4	2.00	6 1/2	2.25	6 3/4	2.50
6 3/8	1.75	6 3/4	2.00	6 7/8	2.00	7 1/8	2.00	7 1/4	2.00	7 1/2	2.25	7 3/4	2.50
7 3/8	1.75	7 3/4	2.00	7 7/8	2.00	8 1/8	2.00	8 1/4	2.00	8 1/2	2.25	8 3/4	2.50
8 3/8	1.75	8 3/4	2.00	8 7/8	2.00	9 1/8	2.00	9 1/4	2.00	9 1/2	2.50	9 3/4	2.50

Leak-Proof Rings 2 3/8 to 3 3/4 by 3/16, 1/4 or 5/16, each,
D.P. \$2.32
Leak-Proof Rings, 3 3/8 to 6 by 3/16, 1/4 or 5/16, each,
D.P. \$2.93

Leak-Proof Rings, 6 1/4 to 7 1/2 by 3/16, 1/4 or 5/16, each,
D.P. \$3.00.
Rings wider than 5/16 not carried in stock, but can be
supplied at slightly higher price.



Will Fit	Size	Will Fit	Size
Abbott-Detroit	4 x 1 1/4	Mitchell-Lewis	4 1/2 x 5/16
Abbott-Detroit	4 1/2 x 1/4	Mitchell-Lewis	4 1/2 x 5/16
Abbott-Detroit	4 1/2 x 1/4	Mitchell-Lewis	4 x 1 1/4
Abbott-Detroit	4 1/2 x 1/4	Mitchell-Lewis	4 1/2 x 3/16
Alco	4.18 x 3/16	Mitchell-Lewis	4 1/4 x 5/16
Alco	4.18 x 1/4	Mitchell-Lewis	4 1/2 x 1/4
American	3 3/4 x 1/4	Mitchell-Lewis	4 1/2 x 5/16
American	4 x 1/4	Oakland	4 x 5/16
American	4 1/4 x 1/4	Oakland	4 1/2 x 5/16
American	4 1/2 x 1/4	Oakland	4 1/2 x 5/16
American	4 1/2 x 5/16	Oldsmobile	4 1/2 x 1/4
American	5 5/8 x 5/16	Oldsmobile	4 1/2 x 5/16
Auburn	4 x 1/4	Oldsmobile	5 x 5/16
Auburn	4 1/4 x 1/4	Overland	3 3/4 x 3/16
Auburn	4 1/2 x 1/4	Overland	4 x 3/16
Auburn	4 5/8 x 1/4	Overland	4 x 1 1/4
Auburn	4 11/16 x 1/4	Overland	4 1/2 x 3/16
Berkshire	4 x 5/16	Overland	4 1/2 x 3/16
Brush	3 3/4 x 5/16	Overland	4 1/2 x 3/16
Buick	4 x 5/16	Packard	4 1/16 x 1 1/4
Buick	4 1/4 x 1/4	Packard	4 1/2 x 1/4
Buick	4 1/2 x 5/16	Packard	5 x 1/4
Cadillac	4 x 5/16	Paige-Detroit	3 3/4 x 1/4
Cadillac	4 1/4 x 5/16	Pope-Hartford	4 1/2 x 1/4
Cadillac	4 1/2 x 5/16	Pope-Hartford	4 5/16 x 1/4
Cadillac	4 1/2 x 1/4	Pope-Hartford	4 1/2 x 5/16
Chalmers	3 3/4 x 1/4	Pope-Hartford (Special)	4 5/16 x 3/4
Chalmers	4 x 1/4	Pope-Hartford (Special)	4 1/2 x 3/4
Chalmers	5 x 1/4	Premier	4 1/2 x 5/16
Cole	4 x 5/16	Reo	4 x 1/4
Cole	4 1/4 x 5/16	Stanley Steamer	4 x 1/4
Cole	4 1/2 x 5/16	Stearns	4 1/2 x 1/4
Cole	3 3/4 x 1/4	Stearns	4 1/2 x 3/4
Correjo	3 3/4 x 1/4	Stevens-Duryea	3 3/4 x 1/4
Cutting	4 x 1/4	Stevens-Duryea	4 1/4 x 1/4
E-M-F	4 1/2 x 5/16	Stevens-Duryea	4 1/2 x 1/4
Elmore	3 3/4 x 1/4	Studebaker	4 1/4 x 1/4
Ford	3 3/4 x 1/4	Thomas	4 1/4 x 1/4
Franklin	3 3/4 x 1/4	Thomas	5 1/2 x 1/4
Franklin	4 x 1/4	Velie	4 1/2 x 1/4
Front Drive	5 1/4 x 1/4	White	3 3/4 x 282
Gramm Truck	4 1/4 x 1/4	White (Special)	4 1/2 x 280
Gramm Truck	5 x 1/4	Winton	4 x 1 1/4
Hudson	3 3/4 x 3/16	Autocar Motor Truck	4 x 5/16
Hudson	4 x 1/4	Autocar Motor Truck Con.	4 1/2 x 5/16
Interstate	4 1/2 x 1/4	Kelley Motor Truck	4 1/2 x 1/4
Jackson	4 x 5/16	Mack and Saner Truck	4 1/2 x 5/16
Jackson	4 1/4 x 5/16	Mack and Saner Truck	5 1/4 x 5/16
Jackson	4 1/2 x 3/16	Alco Taxi	2.953 x 255
Kissel-Kar	4 1/2 x 5/16	Alco Taxi	3 15/16 x 196
Kissel-Kar	4 1/2 x 3/16	Alco Taxi	3 15/16 x 3/16
Kline	4 1/2 x 3/16	Alco Taxi	3 15/16 x 3/4
Kline	4 5/16 x 3/16	Alco Taxi	4.019 x 3/16
Lancia	3.543 x 196	Alco Taxi	4.019 x 1/4
Little	3 1/4 x 3/16	Stearns Taxi	4 1/2 x 1/4
Marion	4 x 3/16	Stearns Taxi	4 1/2 x 1/4
Marion	4 1/4 x 1/4	Thomas Taxi	3 3/4 x 1/4
Mercer	3 3/4 x 2.16	Thomas Taxi	3 3/4 x 3/16
Mitchell-Lewis	3 3/4 x 5/16		
Mitchell-Lewis	3 3/4 x 1/4		
Mitchell-Lewis	3 3/4 x 5/16		

GIBSON QUALITY ACCESSORIES MAKE DEALERS PROFITS



VALVE SPRING RELEASE, LIFTER, ETC.

Chain Valve Spring Release

This is without doubt the most practical tool ever made to remove valves. Will fit any motor. The lever has a narrow fork on one end and a wide one at the other to accommodate valves having split washer instead of pins to hold the spring on the stem.

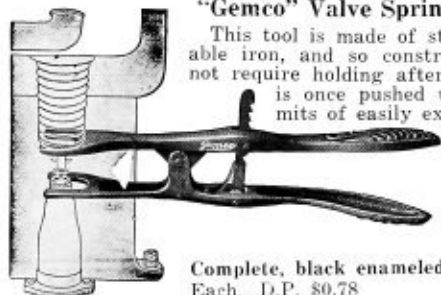
Complete, nickel plated,
each\$0.75
Each...D.P. \$0.78



"Gemco" Valve Spring Release

This tool is made of strong malleable iron, and so constructed as to not require holding after the spring is once pushed up and permits of easily extracting the pin from the stem itself. Can be used on practically any type of motor.

Complete, black enameled, each \$0.75
Each...D.P. \$0.78

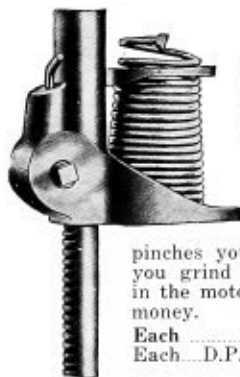


Bryant Valve Spring Mover

It is so compactly designed and arranged that it will compress a valve spring, however awkwardly it may be situated, and enable you to remove the valve without any effort or exertion.

It leaves the valve, spring disk and key free to be removed; it fits any car; it fits any spring; it never slips; it never bends the valve stem; it never bars or pinches your fingers; it holds the spring while you grind the valve; it compresses the spring in the motor; it makes hard work easy; it saves money.

Each\$2.00
Each...D.P. \$3.33



The Kraemer Valve Spring Releaser and Retainer



THE KRAEMER RELEASER & RETAINER
WITH ADJUSTABLE JAW

For Automobiles, Motorcycles and Gas Engines.
This tool is not only a valve spring releaser, but it also retains the valve spring, leaving both hands free and will hold the spring until ready to replace, or the spring can be removed and afterward replaced in the tool and compressed ready for inserting.

Each\$1.50
Each...D.P. \$1.78

Vlcek Valve Lifter

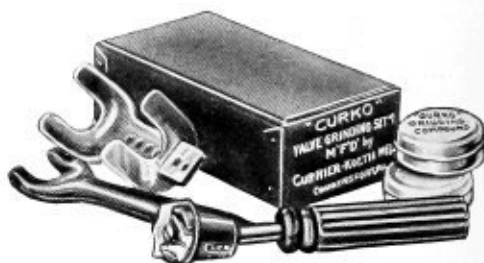


This is the only drop forged valve lifter on the market.

The sliding cam increases the leverage as the valve spring is compressed and allows quick action with greatest ease.

Each\$1.25
Each...D.P. \$1.66

"Curko"



Valve Grinding Set No. 1

Consists of—

- 1 "Curko" Universal Valve Grinder No. 10.
- 1 "Curko" Valve Remover No. 3.
- 2 Boxes "Curko" Grinding Compound (1 fine, 1 coarse).

The usual time consumed, using old style tools, for grinding in the valves of an ordinary motor is from five to ten hours. By using the "Curko" Grinding Tools, a set of valves in the worst possible condition can be ground perfectly in three hours or less, thus saving the cost of the tools on the first job.

Packed in an everlasting fibre box, with telescope cover.

Each\$2.00
Per Set...D.P. \$3.33

The Brown Valve Grinder

The object of the valve grinder is to render the operation of grinding in the valve easy, efficient and at the same time performing the work in about one-quarter the time allotted by older methods. The tool has been designed along simple lines, small of compass, light in weight and permits ready packing by simply removing handle and driver.

Each\$3.50
Each...D.P. \$6.22





WASHER CUTTER AND COTTER PIN TOOLS

Mound Gasket and Washer Cutter



It will cut gaskets up to 24 inches outside diameter suitable for large cylinder heads and flange joints down to small size washers.

The very best material is used in its manufacture.

All parts nickel plated.

Can be used with bit brace, drill press or by hand.

The knives are made of a high quality of steel and will hold a good edge.

No. 50 Mound Gasket and Washer Cutter, nickel plated.....\$2.00
Each.....D.P. \$3.33

"Buckeye" Circle Cutter

For cutting lamp glass, soft sheet copper and rubber gaskets, felt and fiber washers, etc.

One of the most practical and convenient machines for garage or hardware men or for any one in the repair business.



For Cutting Circles Only

Capacity, any size from 1 inch to 14 inches.

Principal uses: For cutting leather, cardboard and felt gaskets, also for cutting headlight glasses or any other circular glasses.

This machine may be mounted on an ordinary table or work bench having a smooth, level surface. An adjustable clamping arrangement is provided that will securely hold the work in place during the process of cutting. A positive measuring scale accurately determines the size of the openings. This scale is graduated in fractions of 1/4 inch.

The tool carrier is so arranged that many different kinds of tools may be used, such as tools for engraving, marking, scoring, embossing, etc.

A sheet of heavy cardboard or plate glass may be used under the work as a cutting foundation. This prevents the knife from cutting into the table surface.

The equipment includes a steel point glass cutting tool, a knife for square edge, one knife for 45-degree bevel edge, and one wrench.

Shipping weight, 30 pounds.

Full directions for operation enclosed with each machine.

Price.....\$18.00
Each.....D.P. \$26.64

Cotter Pin Extractor



Cotter Pin Extractor, 6-inch, each.....\$0.25

Cotter Pin Extractor, 7-inch, each......25

Dozen.....D.P. \$1.60

Mesnard Cotter Pin Plier



To insert, spread and remove spring cotter pins in difficult places has brought about the necessity of this wonderful invention, which has proved beyond doubt that every owner of machinery can not be without it. The combination of cotter pin inserter, spreader, extractor, cutter, screw driver and gas tank wrench makes this a six (6) in one (1) tool, with no adjustments whatever.

Mesnard's Cotter Pin Plier, each.....\$0.75

Each.....D.P. \$1.33

Horat Soft Metal Hammer Mold



Patent applied for.

It meets a distinct want.

A soft metal hammer that you make yourself; that costs but a trifling amount; that you make over with the same metal when it becomes battered; that you will use constantly.

Any one who handles metal knows the efficiency of a soft metal hammer. You can use it on finished steel, brass, bronze, aluminum, gears, cams, sprockets, pins, shafts, screws—on any finished part without injury, thereby saving many unnecessary repair bills.

Made in two sizes for Nos. 2 and 3 hammers. There are but three parts—the bottom of the mold and the ladle combined, the top, and a clamp. One hammer handle is included with the mold.

No. 2 Horat Hammer with mold and ladle, weight two pounds, each.....\$1.70
Each.....D.P. \$3.00

No. 3 Horat Hammer with mold and ladle, weight three pounds, each.....1.90
Each.....D.P. \$3.33



PLIERS

Combination Pliers



These Pliers are drop forged of the best tool steel, the joint is carefully milled and they are finished in a first class manner. Guaranteed in every respect.

No. 55 Combination Pliers, 6-inch, black.....\$0.30
Dozen..D.P. \$5.55
No. 355 Combination Pliers, 6-inch, nicked......40
Dozen..D.P. \$7.22



No. 355 Combination Pliers, 8-inch, nicked.....\$0.60
Dozen..D.P. \$9.33
No. 355 Combination Pliers, 10-inch, nicked......75
Dozen..D.P. \$12.21



We present here an exceptionally high grade tool, not only in quality, but in finish. This tool is carefully forged from 60-carbon steel and is accurately machined. The knurled handles are a distinct feature and add greatly to the beauty of the pliers.

Per Pair
No. 356 Combination Pliers, 5½-inch, nicked.....\$0.45
Dozen..D.P. \$7.53
No. 356 Combination Pliers, 6-inch, nicked......50
Dozen..D.P. \$8.33
No. 356 Combination Pliers, 8-inch, nicked......65
Dozen..D.P. \$10.55
No. 356 Combination Pliers, 10-inch, nicked......80
Dozen..D.P. \$12.77



Distinctly a high grade tool in quality, its utility and finish. Forged from 60-carbon steel, accurately machined and correctly finished with knurled handles.
No. 305 Victor Universal Pliers, 7-inch, nicked.....\$0.75
Dozen..D.P. \$11.99

Slip Joint Side Cutting Pliers



These Pliers are made of a special cutting plier steel, cuts eight-penny box nails with ease, owing to the immense leverage and shape of handles. Is highly nickel plated with beautifully knurled handles, and the words "Forged Steel" struck inside of same. Has two wire cutters, one on either side of fulcrum. Has proved a ready seller, taking the place of both cheap side cutting pliers as well as all combination pliers.
No. 1873 Slip Joint Side Cutting Pliers, 7-inch, per pair..\$0.75
Dozen..D.P. \$11.99

Lap Joint Side Cutting Pliers



Handsomely finished with knurled handles. This tool is strictly high grade. It is carefully forged from 60-carbon steel and is accurately machined. Recognized immediately by mechanics as an exceptional tool.

Lap Joint Side Cutting Pliers

PRICES

No. 1801 Side Cutting Pliers, 6-inch, per pair.....\$0.50
Dozen..D.P. \$14.21
No. 1801 Side Cutting Pliers, 7-inch, per pair......1.10
Dozen..D.P. \$17.76
No. 1801 Side Cutting Pliers, 8½-inch, per pair......1.35
Dozen..D.P. \$20.87



No. 1863 Combination Pliers, 9-inch, nicked, per pair....\$0.75
Dozen..D.P. \$11.10



No. 1903 Thin Nose Combination Pliers, jaws made additional length to insure greater reach and employ two grips, length 7 inches, full nickel, each.....\$0.30
Dozen..D.P. \$12.00



No. 1923 Bent Nose Combination Pliers, the pliers for odd places that are difficult to reach, length 8 inches, full nickel, each.....\$0.85
Dozen..D.P. \$14.10



This is a beautiful as well as serviceable tool. Forged from a superior quality of cutting plier steel.
No. 2601 Diagonal Pliers, 5½-inch, per pair.....\$0.55
Dozen..D.P. \$15.55



No. 1631 Curved Needle Nose Pliers, 5½-inch, nicked, per pair.....\$0.95
Dozen..D.P. \$15.55



No. 1681 Long Nose Side Cutting Chain Pliers, 6-inch, nicked, per pair.....\$0.85
Dozen..D.P. \$14.43



No. 1593 Miller's Pliers, 4½-inch, nicked, per pair....\$0.60
Dozen..D.P. \$15.00



No. 1701 Short Nose Pliers with cutter, nicked, per pair..\$0.75
Dozen..D.P. \$12.00



WRENCHES AND PLIERS

Crescent Adjustable Wrench



The Crescent Wrench can be used in practically every opening where the solid wrench can be used. The 10-inch size takes the place of nine sizes of solid wrenches. Other sizes proportionately.

The handle is drop forged from best carbon steel; the movable jaw from special alloy steel showing four times the strength of ordinary steel; the entire wrench is carbonized, hardened in oil, and tempered. They are neatly finished.

Size 4-inch, Capacity $\frac{1}{2}$ -inch, each.....\$0.65
Dozen..D.P. \$11.55

Size 6-inch, Capacity $\frac{3}{4}$ -inch, each......65
Dozen..D.P. \$11.55

Size 8-inch, Capacity 15/16-inch, each......80
Dozen..D.P. \$14.20

Size 10-inch, Capacity 1 $\frac{1}{4}$ -inch, each.....1.00
Dozen..D.P. \$17.76

Size 12-inch, Capacity 1 $\frac{3}{4}$ -inch, each.....1.25
Dozen..D.P. \$22.00

The Crescent Silent Salesman



Mounted with Six 4-inch Crescent Wrenches
Size 8 $\frac{1}{2}$ x 11 $\frac{1}{2}$ inches

The Crescent Wrench is one of the best tools for the automobile owner that has ever been put on the market.

This display board is made of heavy cardboard, attractively designed and provided with an easel back which locks and will not fall over on a glass show case.

Crescent Wrench Display Board with six 4-inch Crescent Wrenches, each.....\$3.90
Each..D.P. \$5.78

Simplex Pliers



Simplex Combination Pliers are drop-forged from a 60-carbon crucible analysis, open-hearth steel, oil-tempered, hand finished, and unconditionally warranted satisfactory. These pliers are so made that by a quarter turn of the handles they can be used on a wide range of sizes of either round pipe or nuts. Nickel finish.

Simplex Combination Pliers, 5-inch, nicked, each.....\$0.40
Dozen..D.P. \$5.55

Motor Kit Combination Pliers



A high-grade tool of the same quality and finish as the Simplex brand. Has knurled or cross-corrugated handles which insure a perfect grip at all times without hurting the hand. Guaranteed satisfactory. The slip joint permits of a wide range of work.

Motor Kit Combination Pliers, 5-inch, weight 3 $\frac{1}{2}$ ounces, capacity $\frac{3}{4}$ -inch, each.....\$0.40
Dozen..D.P. \$5.55

Motor Kit Combination Pliers, 6-inch, weight 8 ounces, capacity 1-inch, each......40
Dozen..D.P. \$5.55

CeeTeeCo Combination Pliers



The CeeTeeCo is a high-grade tool, drop forged from 60-carbon open-hearth steel, but machine finished instead of hand finished. The machine finish does not give the high polish of the hand work but makes a very satisfactory and rust-proof finish for all-around work.

The slip joint permits of a wide range of sizes in either round pipe or nuts. CeeTeeCo Pliers are made with cross-corrugated handles, which insure a perfect grip without hurting the hand. They are accurately machined with drilled holes and milled teeth and for all practical purposes are the equal of any plier.

CeeTeeCo Combination Pliers, 5-inch, weight 3 $\frac{1}{2}$ ounces, capacity $\frac{3}{4}$ -inch, each.....\$0.35
Dozen..D.P. \$3.89

CeeTeeCo Combination Pliers, 6-inch, weight 8 ounces, capacity 1-inch, each......35
Dozen..D.P. \$3.89



SCREW DRIVERS

Mound Offset Screw Driver No. 27



These screw drivers are made especially to get at screws where a straight tool is not desirable. Made of $\frac{1}{4}$ inch square tool steel.

5-inch, nickel plated, each.....	\$0.25
Dozen.....D.P. \$4.00	
6-inch, nickel plated, each.....	.30
Dozen.....D.P. \$4.22	
7-inch, nickel plated, each.....	.35
Dozen.....D.P. \$4.66	

Twin Screw Driver



A very handy tool for work on coils, magnetos, clocks, etc.

Twin Screw Driver, each.....	\$0.10
Dozen.....D.P. \$1.45	

No. 3 Screw Driver



No. 3 EDELMANN SCREW DRIVER

This is a practical tool and useful around an automobile.

Each.....	\$0.25
Dozen.....D.P. \$4.00	

Four-In-One Screw Driver



This clever little tool is a combination of the several screw drivers shown on preceding page. Each tool fits into the one larger, making a neat compact combination which fits in the vest pocket.

Length over all, $5\frac{1}{2}$ inches.

Each.....	\$0.60
Dozen.....D.P. \$10.00	

Three-In-One Screw Driver



Same construction as in the Four-In-One, but does not contain the largest size blade, being a combination of our Twin and Perfecto Screw Driver.

Length over all, $3\frac{3}{4}$ inches.

Each.....	\$0.25
Dozen.....D.P. \$4.00	

Perfect Handle Screw Drivers



The Perfect Handle Screw Drivers are the most durable and substantial screw drivers ever placed upon the market. The oval-shaped wood handle gives great leverage and fits the hand perfectly. The end of the handle is very heavy and can be used as a hammer head.

Perfect Handle Screw Driver, length of blade 4 inches, diameter $\frac{1}{4}$ inch, each.....	\$0.40
Dozen.....D.P. \$6.11	
Perfect Handle Screw Driver, length of blade 5 inches, diameter $\frac{1}{4}$ inch, each.....	.50
Dozen.....D.P. \$7.22	
Perfect Handle Screw Driver, length of blade 6 inches, diameter, $\frac{5}{16}$ inch, each.....	.60
Dozen.....D.P. \$8.55	
Perfect Handle Screw Driver, length of blade 7 inches, diameter $\frac{5}{16}$ inch, each.....	.60
Dozen.....D.P. \$10.00	
Perfect Handle Screw Driver, length of blade 8 inches, diameter $\frac{1}{2}$ inch, each.....	.75
Dozen.....D.P. \$11.55	
Perfect Handle Screw Driver, length of blade 10 inches, diameter $\frac{1}{2}$ inch, each.....	.90
Dozen.....D.P. \$14.21	
Perfect Handle Screw Driver, length of blade 12 inches, diameter $\frac{1}{2}$ inch, each.....	1.00
Dozen.....D.P. \$17.32	

Perfect Handle Machinist Screw Driver



Perfect Handle Machinist Screw Driver, length over all $9\frac{1}{2}$ inches, length of blade $4\frac{1}{2}$ inches, diameter $\frac{1}{8}$ inch, each.....	\$0.75
Dozen.....D.P. \$17.52	
Perfect Handle Machinist Screw Driver, length over all $10\frac{1}{2}$ inches, length of blade 5 inches, diameter $\frac{3}{16}$ inch, each.....	1.00
Dozen.....D.P. \$18.65	

The "Triple Lever," Perfect Handle Screw Driver



A very strong screw driver for mechanics and automobilists, with point $\frac{1}{4}$ inch wide and $5/64$ inch thick. A convenient and ingenious arrangement by which the benefit of a variety of extraordinary leverages can be obtained in an instant.

Each.....	\$1.50
Dozen.....D.P. \$25.53	

Wood Handle Screw Driver



No. 1001

Wood Handle Screw Driver with forged steel blade. Riveted to hard wood handle. Finished in black rubber enamel.

5-inch blade, each.....	\$0.25
Dozen.....D.P. \$2.67	



SCREW DRIVERS

Insulated Screw Driver



No. 87 Insulated Screw Driver. The finest kind of a tool to use around ignition apparatus on the automobile or for electricians' use. Insulated to within 2 inches of end of the blade.

No. 87 Insulated Screw Driver, 2-inch, each	\$0.25
Dozen...D.P. \$3.56	
No. 87 Insulated Screw Driver, 2½-inch, each	.30
Dozen...D.P. \$3.89	
No. 87 Insulated Screw Driver, 3-inch, each	.35
Dozen...D.P. \$4.44	
No. 87 Insulated Screw Driver, 4-inch, each	.40
Dozen...D.P. \$5.00	
No. 87 Insulated Screw Driver, 5-inch, each	.45
Dozen...D.P. \$6.00	
No. 87 Insulated Screw Driver, 6-inch, each	.50
Dozen...D.P. \$7.22	
No. 87 Insulated Screw Driver, 7-inch, each	.60
Dozen...D.P. \$8.33	
No. 87 Insulated Screw Driver, 8-inch, each	.70
Dozen...D.P. \$9.55	
No. 87 Insulated Screw Driver, 10-inch, each	.80
Dozen...D.P. \$11.99	
No. 87 Insulated Screw Driver, 12-inch, each	1.00
Dozen...D.P. \$14.43	

Slim Screw Driver



No. 130J Extra Slim Screw Driver. A very fine tool for magneto-coil use, or anywhere where small screws are used, made from highly polished steel rod, correctly tempered, has a long ferrule and black, friction polished handle.

No. 130J Extra Slim Screw Driver, length of blade 1½-inch, each	\$0.20
Dozen...D.P. \$2.89	
No. 130J Extra Slim Screw Driver, length of blade 2-inch, each	.20
Dozen...D.P. \$3.00	
No. 130J Extra Slim Screw Driver, length of blade 3-inch, each	.25
Dozen...D.P. \$3.33	
No. 130J Extra Slim Screw Driver, length of blade 4-inch, each	.25
Dozen...D.P. \$3.55	
No. 130J Extra Slim Screw Driver, length of blade 5-inch, each	.30
Dozen...D.P. \$4.00	

All Steel Screw Driver



Tool Steel Drop Forged

All Steel Screw Drivers, ¼-inch, polished, square shank, length 6 inches, each	\$0.40
Dozen...D.P. \$6.66	
All Steel Screw Drivers, ⅝-inch, polished, square shank, length 7½ inches, each	.50
Dozen...D.P. \$8.33	
All Steel Screw Drivers, ¾-inch, polished, square shank, length 9 inches, each	.60
Dozen...D.P. \$10.00	

Champion Screw Driver



Forged from toughest steel. Intended for and will stand harder work than any other screw driver. Stronger construction. Tougher temper. Finer finish. Every blade tested to split a screw driver head.

Champion Screw Drivers, 4-inch, each	\$0.35
Dozen...D.P. \$5.00	
Champion Screw Drivers, 5-inch, each	.45
Dozen...D.P. \$5.66	
Champion Screw Drivers, 6-inch, each	.50
Dozen...D.P. \$6.66	
Champion Screw Drivers, 7-inch, each	.60
Dozen...D.P. \$8.00	
Champion Screw Drivers, 8-inch, each	.70
Dozen...D.P. \$8.88	
Champion Screw Drivers, 10-inch, each	.85
Dozen...D.P. \$11.33	

Yankee Screw Driver



No. 10 Yankee Ratchet Screw Driver, 2-inch, each	\$0.50
Dozen...D.P. \$6.66	
No. 10 Yankee Ratchet Screw Driver, 3-inch, each	.70
Dozen...D.P. \$9.33	
No. 10 Yankee Ratchet Screw Driver, 4-inch, each	.80
Dozen...D.P. \$10.66	
No. 10 Yankee Ratchet Screw Driver, 5-inch, each	.90
Dozen...D.P. \$11.99	
No. 10 Yankee Ratchet Screw Driver, 6-inch, each	1.00
Dozen...D.P. \$13.32	

Yankee Ratchet Spiral



No. 30 Yankee Ratchet Spiral Screw Driver, each	\$2.30
Dozen...D.P. \$33.30	

"Telegraph" Screw Driver



Round Blade, Crucible Steel, carefully hardened and tempered, finished bright. Hard Wood Handle.

No. 230 Telegraph Screw Driver, 2-inch, each	\$0.30
Dozen...D.P. \$2.78	
No. 230 Telegraph Screw Driver, 3-inch, each	.30
Dozen...D.P. \$3.00	
No. 230 Telegraph Screw Driver, 4-inch, each	.30
Dozen...D.P. \$3.11	
No. 230 Telegraph Screw Driver, 5-inch, each	.35
Dozen...D.P. \$3.56	
No. 230 Telegraph Screw Driver, 6-inch, each	.40
Dozen...D.P. \$3.89	
No. 230 Telegraph Screw Driver, 7-inch, each	.40
Dozen...D.P. \$4.00	
No. 230 Telegraph Screw Driver, 8-inch, each	.45
Dozen...D.P. \$4.22	
No. 230 Telegraph Screw Driver, 10-inch, each	.50
Dozen...D.P. \$4.44	
No. 230 Telegraph Screw Driver, 12-inch, each	.50
Dozen...D.P. \$4.67	



THE GIBSON COMPANY

INDIANAPOLIS



WRENCHES

Billings & Spencer Wrench Sales Board No. 3



The board is designed to hang in a convenient position back of the counter, or to stand up on the floor.

It is handsomely finished with trademark at the top.

The wrenches hang in one-half dozen lots and they are selected as being the sizes and styles most in demand.

The dealer is entitled to one of these boards free on condition that he purchase the wrenches complete as per list, full finished, and in lots of one-half dozen each.

A printed card giving the number, bolt sizes and milled openings of the wrenches as placed on the board will be furnished with each board.

No. 3 B.&S. Wrench Sales Board, complete with 6 each of the 35 sizes (210 in all) full finished wrenches as shown by list that follows, each, D.P. \$123.00

Prices are also given for wrenches when desired without the board.

15° Double Head Wrenches

No.	U.S.S. Bolt Sizes	Set Screws	Sq.Hd. Caps	Hex. Hd. Caps	A.L. A.M.	S.A.E.	M'T'd Op'gs	Full Fin. Each
287Sp.	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. \$0.31
291Sp.	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .49
296Sp.	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .67
297Sp.	$\frac{1}{2}$	1	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .80
301Sp.	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. 1.29

15° Double Head Wrenches (Thin)

1350	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	D.P. .31
1352	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	D.P. .34
1354	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	D.P. .42
1356	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .56
1358	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	D.P. .56

15° Double Head Wrenches

285	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	D.P. .37
287	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	D.P. .81
289	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	D.P. .40
291	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .49
293	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	D.P. .58
295	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .67
298	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	D.P. .80
301	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. 1.29

15° Double Head Wrenches

675	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	D.P. .36
676	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	D.P. .40
677	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	D.P. .54
678	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .62
679	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	D.P. .74
680	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .87
681	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	D.P. 1.29

General Service Wrenches

550	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	D.P. .29
551	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	D.P. .49
552	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	D.P. .62
553	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .76
554	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	D.P. .88
555	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .99
556	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	D.P. .88
557	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .49
558	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	D.P. .62
559	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .76

Billings & Spencer Wrench Sales Board No. 4



No. 4 B. & S. Wrench Sales Board complete with 6 each of 21 sizes (126 in all) full finished wrenches as shown by list that follows:

Per Board, complete.....D.P. \$71.90

Prices are also given when wrenches are wanted without board.

General Service Wrenches

No.	U.S.S. Bolt Sizes	Set Screws	Sq.Hd. Caps	Hex. Hd. Caps	A.L. A.M.	S.A.E.	M'T'd Op'gs	Full Fin. Each
600	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. \$0.29
601	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .38
602	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .49
603	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .62
604	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .74

General Service Wrenches

600	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .29
601	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .38
602	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .49
603	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .62
604	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .74

15° Double Head Wrenches

499	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	D.P. \$0.38
290	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	D.P. .45
292	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	D.P. .54
508	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .60
517	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	D.P. .98
301	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. 1.29

15° Double Head Wrenches

495	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	D.P. .31
500	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	D.P. .40
508Sp.	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	D.P. .80
514	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	D.P. .76
290Sp.	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	D.P. 1.46



BILLINGS & SPENCER WRENCHES

Wrench Sales Board No. 5

For T Handle Socket Wrenches



The board is designed to hang in a convenient position back of the counter, or to stand up on the floor.

It is handsomely finished with trade-mark at the top.

The wrenches hang in convenient lots, and they are selected as being the sizes and styles most in demand.

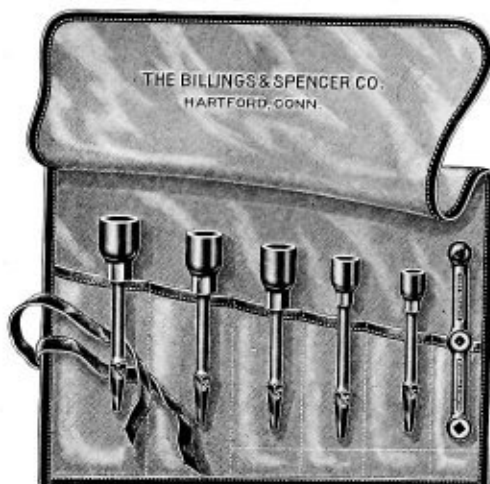
Board No. 5 contains 35 Socket Wrenches, comprising three wrenches each of 9 sizes, and two each of the remaining 4 sizes.

The dealer is entitled to one of these boards free on condition that he purchase the wrenches on the board as stated above. A printed card giving the number, bolt sizes, milled openings, etc. of the wrenches as placed on the board will be furnished with each board.

No. 5 B. & S. Socket Wrench Sales Board, complete with 35 full finished socket wrenches, each\$34.66
Each.....D.P. \$38.48

Wrench No.	Hexagon Openings				Length Over All	Diam. Head	A. L. A. M.	S. A. E.	Price Full Finished
	For U. S. Standard Nut, Size Bolt	For U. S. Screw, Diam. Screw	For Cap Screw, Diam. Screw	Short Diam. Bolt'd Opening					
723A	1/4	5-16	33-64	5 1/4	3/4	5-16	5-16	D.P.	\$0.72
724A	..	3/8	37-64	5 3/4	7/8	3/8	3/8	D.P.	.80
724B	5-16	..	39-64	5 3/4	7/8	..	..	D.P.	.80
725A	..	7-16	41-64	6 1/4	1	..	7-16	D.P.	.88
725B	3/8	..	45-64	6 1/4	1 1/4	7-16	..	D.P.	.99
725C	..	1/2	49-64	6 1/4	1 1/4	3/8	1/2	D.P.	.99
726A	7-16	..	51-64	7	1 1/4	..	..	D.P.	1.08
726B	..	9-16	53-64	7	1 1/4	..	..	D.P.	1.08
726C	1/2	3/8	57-64	7	1 1/4	9-16	9-16	D.P.	1.22
727A	9-16	..	63-64	7 3/4	1 1/2	..	..	D.P.	1.38
727B	..	1 1/4	1 1/4	7 3/4	1 1/2	11-16	11-16	D.P.	1.38
728A	3/4	..	1 5/64	8 3/4	1 5/8	..	3/4	D.P.	1.56
729A	1	1	1 9/32	9 3/4	1 7/8	3/4	3/4	D.P.	2.11

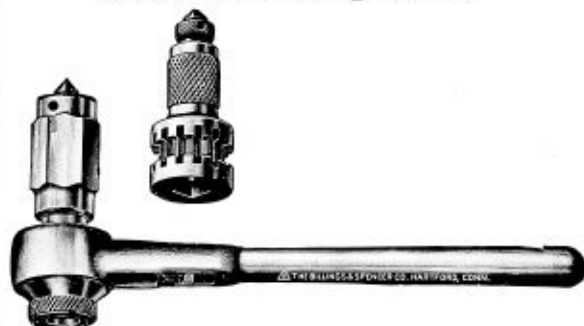
Bit-Brace Socket Wrench Set



No. 16

Number	U. S. Std. Bolt Size	Openings	Length	Price Finished
923A	1/4	33/64	4 1/4	D.P. \$0.72
924B	3/8	39/64	5 1/4	D.P. .80
925B	1/2	45/64	5 3/4	D.P. .99
926A	3/4	51/64	5 3/4	D.P. 1.08
926C	1	57/64	6	D.P. 1.22
Handle				D.P. .67
Bag				D.P. .67
Complete				D.P. 6.10

No. 0 Double-Acting Ratchet



Model All

A new high-grade combination tool for light work. Double-acting or reversible.

This Ratchet differs materially from those now on the market in that the change of sockets is quickly and easily made without the use of a wrench or other tool.

The tool includes two removable sockets for taper and square shank drills as shown in cut. The taper socket is No. 1 Morse taper, taking all sizes of taper shank twist drills from 1/8 to 19/32 inch. The square socket takes bit stock, square shank twist drills.

The tool is drop-forged and properly finished. All working parts are hardened, and the tool is thoroughly high grade in all respects.

No. 0 Ratchet, 8-inch handle, including taper and square sockets, complete.....\$7.00
Complete.....D.P. \$11.10



WRENCHES



Billings & Spencer Wrenches

Set No. 2



Billings & Spencer Set No. 7

These wrenches may be used in combination—a wrench on the screw head with another on the corresponding nut.

Wrench No.	For A. L. A. M. Std. Nuts and Cap Screws, Size Bolt or Screw	Milled Openings, Inches	Length, Inches	Price, Finished D.P.
Set No. 2	550 1/4 & 5/8	3/8 & 1/2	6 1/4	\$0.29
551 1/2 & 3/4	1/2 & 3/4	7/8 & 1	8 1/4	.49
552 3/4 & 1	3/4 & 1	1 1/8 & 1 1/4	10 1/4	.62
553 1 & 1 1/8	1 & 1 1/8	1 1/2 & 1 3/4	12 1/4	.76
554 1 1/8 & 1 1/4	1 1/8 & 1 1/4	1 3/4 & 2	14 1/4	.98

Per set of five in pasteboard box.....D.P. \$3.15
Canvas Bag.....D.P. \$0.51

No. 2 1/2 B. & S. General Service Wrench Set

Wrench No.	Size Screw A. L. A. M. Head & Nut	Size Screw S. A. E. Head & Nut	Milled Opening	Length	Price, Full Fin.
Set No. 2 1/2	660 1/4 & 3/4	1/4 & 3/8	3/8 & 1/2	6 1/4	\$0.29
661 1/2 & 3/4	1/2 & 3/4	3/8 & 1/2	7/8 & 1	8 1/4	.38
662 3/4 & 1	3/4 & 1	1 & 1 1/8	1 1/8 & 1 1/4	10 1/4	.49
663 1 & 1 1/8	1 & 1 1/8	1 1/8 & 1 1/4	1 3/8 & 1 3/4	12 1/4	.62
553Sp. 1 1/8 & 1 1/4	1 1/8 & 1 1/4	1 3/8 & 1 3/4	1 5/8 & 2	14 1/4	.76

Per set of five in pasteboard box.....D.P. \$2.53
Canvas Bag, extra.....D.P. .51

No. 4 B. & S. General Service Wrench Set

No. of Wrench	Milled Openings, Inches	Length	Thickness of Head	Price, Unfinished	Price, Fin. D.P.
Set No. 4	660 3/8 & 1/2	6 1/4	7/16	\$0.13	\$0.29
661 1/2 & 3/4	7/8 & 1	8 1/4	1/4	.17	.38
662 3/4 & 1	1 & 1 1/8	10 1/4	3/8	.22	.49
663 1 & 1 1/8	1 1/8 & 1 1/4	12 1/4	1/2	.28	.62
664 1 1/8 & 1 1/4	1 3/8 & 1 3/4	14 1/4	5/8	.34	.76

Price of Set No. 4, full finished, in pasteboard box.....D.P. \$2.53

Special Canvas Bag for either set.....D.P. .51



No. 11

The B. & S. 15° Angle Double End Wrench

A. L. A. M. Standard
Check Nut Wrenches

No.	A. L. A. M. Std. Nuts and Cap. Size Bolt or Screw	Milled Openings	Lengths	Thickness of Heads	Price, Full Finished D.P.
1150 W	1/4 & 5/8	3/8 & 1/2	4 1/2	5/16	\$0.31
1151 W	1/2 & 3/4	7/8 & 1	5 1/2	3/8	.40
1152 W	3/4 & 1	1 & 1 1/8	7	1/2	.56
1153 W	1 & 1 1/8	1 1/8 & 1 1/4	8 1/2	5/8	.74
1154 W	1 1/8 & 1 1/4	1 3/8 & 1 3/4	10 1/2	3/4	.98

Per set, No. 11.....D.P. \$3.04
Paraffined Canvas Bag for Set No. 11, leather bound, each.....D.P. .51

No.	Size of Screw	Milled Opening	Extreme Length	Thickness of Head	Price, Full Finish D.P.
490	1/4 & 3/8	3/8 & 1/2	5	1/4	\$0.38
491	1/2 & 3/4	7/8 & 1	6 1/2	3/8	.45
492	3/4 & 1	1 & 1 1/8	7 1/2	1/2	.54
493	1 & 1 1/8	1 1/8 & 1 1/4	9	5/8	.68
494	1 1/8 & 1 1/4	1 3/8 & 1 3/4	10 1/2	3/4	.86
495	1 3/8 & 1 3/4	1 5/8 & 2	12 1/2	7/8	1.29

Price per set of six in pasteboard box.....D.P. \$4.22

Paraffined Canvas Bags for set No. 7, leather bound.....D.P. .67

No. 8 B. & S. A. L. A. M. Wrench Set



No.	A. L. A. M. Std. Nuts and Cap Screws, Size Bolt or Screw	Milled Opening, Inches	Extreme Length	Thickness of Head	Price Finished D.P.
287Sp.	1/4 & 3/8	3/8 & 1/2	4 1/2	5/16	\$0.31
288Sp.	1/2 & 3/4	7/8 & 1	5 1/2	3/8	.49
289Sp.	3/4 & 1	1 & 1 1/8	7	1/2	.67
290Sp.	1 & 1 1/8	1 1/8 & 1 1/4	8 1/2	5/8	.80
291Sp.	1 1/8 & 1 1/4	1 3/8 & 1 3/4	10 1/2	3/4	1.29

Price per set in pasteboard box, finished.....D.P. \$3.56

Paraffined Canvas Bags for Set No. 8, leather bound, D.P. .51

No. 8 1/2 Billings & Spencer Wrench Set

Wrench No.	Size Screw A. L. A. M. Head & Nut	Size Screw S. A. E. Head & Nut	Milled Openings	Length	Price, Full Finish D.P.
495	1/4 & 3/8	3/8 & 1/2	3/8 & 1/2	4 1/2	\$0.31
496	1/2 & 3/4	7/8 & 1	7/8 & 1	5 1/2	.40
497Sp.	3/4 & 1	1 & 1 1/8	1 & 1 1/8	7	.60
514	1 & 1 1/8	1 1/8 & 1 1/4	1 1/8 & 1 1/4	8	.76
296Sp.	1 1/8 & 1 1/4	1 3/8 & 1 3/4	1 3/8 & 1 3/4	10	.98

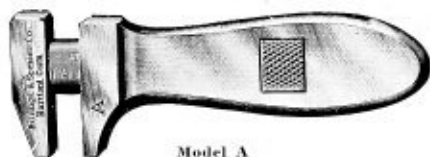
Per set of five in pasteboard box.....D.P. \$3.04

Paraffined Canvas Bag, extra.....D.P. .51



BILLINGS & SPENCER WRENCHES

Model A Wrench



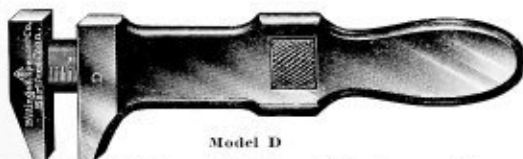
Model A

Model A B.&S. Wrench, $4\frac{1}{2}$ inches, 1 inch capacity, weight $7\frac{1}{2}$ ounces, full nickel, each.....\$0.90
Dozen.....D.P. \$14.66



Model B

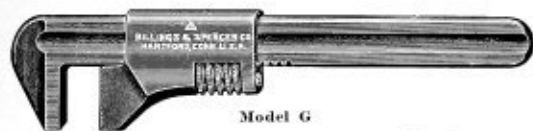
Model B B.&S. Wrench, 5 inches, 1 inch capacity, weight $7\frac{1}{2}$ ounces, full nickel, each.....\$0.90
Dozen.....D.P. \$14.66



Model D

Model D B.&S. Wrench, 6 inches, $1\frac{1}{4}$ inch capacity, weight $11\frac{1}{4}$ ounces, full nickel, each.....\$1.10
Dozen.....D.P. \$17.76

Adjustable Automobile Wrenches



Model G

	Total Length, In.	Opens, In.	Thickness of Jaw, In.	Depth of Jaw, In.	Weight
No. 1 6-in. Wrench.....	6 $\frac{1}{2}$	1 $\frac{1}{2}$	$\frac{7}{16}$	1	10 $\frac{1}{2}$ oz.
No. 2 8-in. Wrench.....	8	1 $\frac{1}{2}$	$\frac{7}{16}$	1 $\frac{1}{2}$	16 $\frac{1}{2}$ oz.
No. 3 10-in. Wrench.....	10 $\frac{1}{2}$	2 $\frac{1}{8}$	$\frac{7}{16}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$ lb.
No. 4 12-in. Wrench.....	12 $\frac{1}{2}$	2 $\frac{3}{8}$	$\frac{7}{16}$	1 $\frac{1}{2}$	2 lb.
No. 5 14-in. Wrench.....	14 $\frac{1}{2}$	2 $\frac{1}{2}$	$\frac{7}{16}$	1 $\frac{1}{2}$	4 lb.
No. 6 18-in. Wrench.....	18 $\frac{1}{2}$	3 $\frac{1}{8}$	$\frac{7}{16}$	2 $\frac{1}{2}$	7 lb.

- No. 1 Model G B.&S. Wrench, 6-inch, full finish, each.....\$0.90
Dozen.....D.P. \$14.20
- No. 2 Model G B.&S. Wrench, 8-inch, full finish, each.....1.25
Dozen.....D.P. \$17.76
- No. 3 Model G B.&S. Wrench, 10-inch, full finish, each.....1.50
Dozen.....D.P. \$21.32
- No. 4 Model G B.&S. Wrench, 12-inch, full finish, each.....2.00
Dozen.....D.P. \$31.97
- No. 5 Model G B.&S. Wrench, 14-inch, full finish, each.....2.50
Dozen.....D.P. \$42.63
- No. 6 Model G B.&S. Wrench, 18-inch, full finish, each.....3.25
Dozen.....D.P. \$60.50

Adjustable "S" Nut Wrenches



Model H

This wrench combines the advantages of a solid machine wrench with the convenience of an adjustable wrench. Every part is a drop forging, and the sliding jaw is fitted in a double groove, which greatly adds to the strength of the tool.

- No. 5 B.&S. Wrench, Model H, 6-inch, $\frac{1}{2}$ -inch capacity, weight 8 ounces, each.....\$0.90
Dozen.....D.P. \$14.20
- No. 6 B.&S. Wrench, Model H, 8-inch, $1\frac{1}{8}$ -inch capacity, weight 1 pound 1 ounce, each.....1.10
Dozen.....D.P. \$16.00
- No. 7 B.&S. Wrench, Model H, 10-inch, $1\frac{1}{8}$ -inch capacity, weight 1 pound 11 ounces, each.....1.25
Dozen.....D.P. \$17.76
- No. 8 B.&S. Wrench, Model H, 12-inch, $1\frac{1}{8}$ -inch capacity, weight 2 pounds 5 ounces, each.....1.40
Dozen.....D.P. \$19.98

Adjustable Engineer's Wrench



Model F

- 6-inch B.&S. Adjustable Engineer's Wrench, Model F, $\frac{1}{2}$ -inch capacity, weight $4\frac{1}{2}$ ounces, each.....\$0.80
Dozen.....D.P. \$13.88
- 8-inch B.&S. Adjustable Engineer's Wrench, Model F, $\frac{1}{2}$ -inch capacity, weight $9\frac{1}{2}$ ounces, each.....1.25
Dozen.....D.P. \$17.20
- 10-inch B.&S. Adjustable Engineer's Wrench, Model F, $1\frac{1}{8}$ -inch capacity, weight 1 pound, each 1.50
Dozen.....D.P. \$21.32
- 12-inch B.&S. Adjustable Engineer's Wrench, Model F, $1\frac{1}{8}$ -inch capacity, weight 1 pound 14 ounces, each.....1.75
Dozen.....D.P. \$26.64



BILLINGS & SPENCER WRENCHES AND TOOL KITS

Adjustable Spanner Wrench

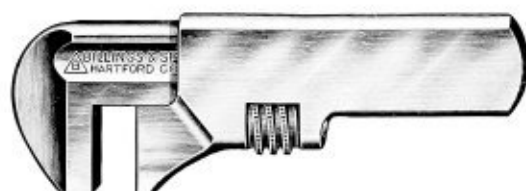


Model L

Drop forged; of the best steel for the purpose, strap polished and case hardened. The adjusting jaw is easily manipulated, and, when adjustment is made, held in place by a tempered steel spring in conjunction with the serrations cut on the under side of the wrench and the teeth of the jaw.

No.	Takes Circles Inches	Diameter of Pin Inches	Length of Pin Inches	Length of Wrench Inches	Each
0	$\frac{1}{2}$ to 2	$\frac{3}{4}$	$\frac{1}{2}$	7	\$1.00
Dozen.....D.P.					\$14.20
1	2 to 4	$\frac{1}{2}$	$\frac{1}{2}$	9	1.10
Dozen.....D.P.					\$16.00
2	2 to 4	$\frac{5}{8}$	$\frac{1}{2}$	9	1.25
Dozen.....D.P.					\$17.76
3	2 to 4 $\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	10 $\frac{1}{2}$	1.75
Dozen.....D.P.					\$26.64

Wrench Model 97



For use on bicycles, motorcycles, automobiles, etc. B.&S. original design. Millions now in use.

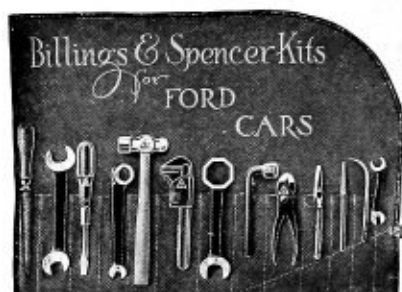
Model 97 B.&S. Wrench, 4 $\frac{1}{2}$ -inch, 1 $\frac{1}{2}$ -inch capacity, weight 5 $\frac{1}{2}$ ounces, nickel finish, each.....\$0.80
Dozen.....D.P. \$12.00

Improved Combination Pliers



No. 1 B.&S. Combination Pliers, 6-inch, full nickel finish, each.....	\$1.10
Dozen.....D.P.	\$16.00
No. 2 B.&S. Combination Pliers, 8-inch, full nickel finish, each.....	1.50
Dozen.....D.P.	\$23.98
No. 3 B.&S. Combination Pliers, 10-inch, full nickel finish, each.....	1.75
Dozen.....D.P.	\$27.98
No. 4 B.&S. Combination Pliers, 14-inch, full nickel finish, each.....	2.50
Dozen.....D.P.	\$39.96

Tool Kit

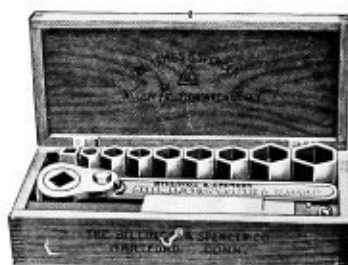


This kit is made up of tools specially adapted to use on Ford cars. They are selected from the well-known Billings & Spencer drop forged line, insuring quality and durability. The bag is made of good quality of canvas, bound edges, and leather strap. The tools are as follows:

- 1 8-inch Auto Wrench
- 1 6-inch Combination Pliers
- 1 9-inch Screw Driver
- 1 Double Head Wrench, openings $\frac{1}{2}$ -in. and $1\frac{1}{2}$ -in.
- 1 Double Head Wrench, openings $\frac{3}{4}$ -in. and $\frac{1}{2}$ -in.
- 1 Double Head Spark Plug Wrench $\frac{1}{2}$ -in. and $\frac{3}{8}$ -in.
- 1 Double Head Hub Cap Wrench $1\frac{1}{2}$ -in. and $1\frac{1}{4}$ -in.
- 1 Socket Wrench, opening $\frac{5}{8}$ -in.
- 1 8-ounce Ball Pein Hammer
- 1 Chisel, 1 Punch, 1 Cotter Pin Tool, 1 File

Each, including bag and tools as above.....\$4.50
Each.....D.P. \$7.22

Allen Friction Wrench Set



Spark Plug Socket, Short Extension, Long Extension, Special Box; 8 Pressed Steel Sockets, Specially Heat Treated.

Consists of the following sizes: 13-32, 17-32, 19-32, $\frac{11}{16}$, 23-32, 25-32, 31-32, 15-32 in. hex.

No. 9 Allen Friction Wrench Set.....\$6.00
Each.....D.P. \$8.88

Allen Friction Ford Special Set

A strictly high grade Wrench Set for Ford cars.

The Allen Friction Wrench, with no lost motion, works in places where no ratchet wrench can be used, including all crank shaft bearings.

Ford Special Set.....\$6.00
Each.....D.P. \$8.88

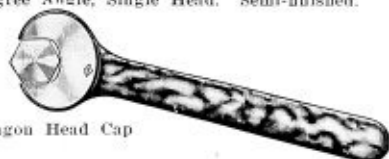
Same as Size No. 9 except special sockets to fit nuts of the Ford automobile.



WRENCHES

Williams Light Cap Screw Wrenches

15-Degree Angle, Single Head. Semi-finished.

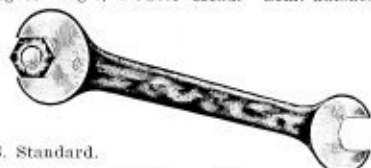


For Hexagon Head Cap Screws.

	Diameter Screws	Opening Milled	Extreme Length	Thickness Heads	Each
No. 700	$\frac{1}{8}$	$\frac{3}{8}$	$3\frac{1}{2}$	$\frac{1}{8}$	D. P. \$0.15
No. 701	$\frac{1}{4}$	$\frac{1}{2}$	4	$\frac{1}{4}$	D. P. .15
No. 701A	$\frac{1}{4}$	$\frac{1}{2}$	4	$\frac{1}{4}$	D. P. .17
No. 702	$\frac{3}{8}$	$\frac{5}{8}$	$4\frac{1}{2}$	$\frac{3}{8}$	D. P. .20
No. 703	$\frac{1}{2}$	$\frac{3}{4}$	$5\frac{1}{2}$	$\frac{1}{2}$	D. P. .24
No. 704	$\frac{5}{8}$	$\frac{7}{8}$	$6\frac{1}{2}$	$\frac{5}{8}$	D. P. .28

Williams Check Nut or Thin Wrenches

15-Degree Angle, Double Head. Semi-finished.



For U. S. Standard.

	Nuts; Size Bolts	Openings Milled	Extreme Length	Thickness Heads	Each
No. 623	$\frac{1}{8}$ & $\frac{1}{4}$	$\frac{1}{2}$ & $\frac{3}{4}$	$4\frac{1}{2}$	$\frac{1}{8}$ & $\frac{1}{4}$	D. P. \$0.24
No. 625	$\frac{1}{4}$ & $\frac{3}{8}$	$\frac{3}{4}$ & 1	$4\frac{1}{2}$	$\frac{1}{4}$ & $\frac{3}{8}$	D. P. .24
No. 627	$\frac{3}{8}$ & $\frac{1}{2}$	1 & $1\frac{1}{4}$	$5\frac{1}{2}$	$\frac{3}{8}$ & $\frac{1}{2}$	D. P. .32
No. 629	$\frac{1}{2}$ & $\frac{5}{8}$	$1\frac{1}{4}$ & $1\frac{3}{4}$	$6\frac{1}{2}$	$\frac{1}{2}$ & $\frac{5}{8}$	D. P. .42
No. 631	$\frac{5}{8}$ & $\frac{3}{4}$	$1\frac{3}{4}$ & 2	$6\frac{1}{2}$	$\frac{5}{8}$ & $\frac{3}{4}$	D. P. .42
No. 633	$\frac{3}{4}$ & 1	2 & $2\frac{1}{4}$	$8\frac{1}{2}$	$\frac{3}{4}$ & 1	D. P. .56
No. 637	$\frac{7}{8}$ & $1\frac{1}{8}$	$2\frac{1}{4}$ & $2\frac{3}{4}$	$10\frac{1}{2}$	$\frac{7}{8}$ & $1\frac{1}{8}$	D. P. .74

Williams Semi-Finished Engineers' Wrench

15-Degree Angle, Double Head.

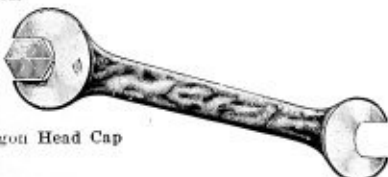


For U. S. Standard.

	Nuts; Size Bolts	Openings Milled	Extreme Length	Thickness Heads	Each
No. 23	$\frac{1}{8}$ & $\frac{1}{4}$	$\frac{1}{2}$ & $\frac{3}{4}$	4	$\frac{1}{8}$ & $\frac{1}{4}$	D. P. \$0.24
No. 25	$\frac{1}{4}$ & $\frac{3}{8}$	$\frac{3}{4}$ & 1	$4\frac{1}{2}$	$\frac{1}{4}$ & $\frac{3}{8}$	D. P. .30
No. 27	$\frac{3}{8}$ & $\frac{1}{2}$	1 & $1\frac{1}{4}$	5	$\frac{3}{8}$ & $\frac{1}{2}$	D. P. .37
No. 29	$\frac{1}{2}$ & $\frac{5}{8}$	$1\frac{1}{4}$ & $1\frac{3}{4}$	$6\frac{1}{2}$	$\frac{1}{2}$ & $\frac{5}{8}$	D. P. .44
No. 31	$\frac{5}{8}$ & $\frac{3}{4}$	$1\frac{3}{4}$ & 2	$7\frac{1}{2}$	$\frac{5}{8}$ & $\frac{3}{4}$	D. P. .50
No. 33	$\frac{3}{4}$ & 1	2 & $2\frac{1}{4}$	$8\frac{1}{2}$	$\frac{3}{4}$ & 1	D. P. .65
No. 37	$\frac{7}{8}$ & $1\frac{1}{8}$	$2\frac{1}{4}$ & $2\frac{3}{4}$	$11\frac{1}{2}$	$\frac{7}{8}$ & $1\frac{1}{8}$	D. P. .97

Williams Semi-Finished Wrenches

15-Degree Angle, Light Cap Screw Wrench for Hex Head Cap Screws.



For Hexagon Head Cap Screws.

	Diameter Screws	Openings Milled	Extreme Length	Thickness Heads	Each
No. 723	$\frac{1}{8}$ & $\frac{1}{4}$	$\frac{3}{8}$ & $\frac{1}{2}$	4	$\frac{1}{8}$ & $\frac{1}{4}$	D. P. \$0.24
No. 725	$\frac{1}{4}$ & $\frac{3}{8}$	$\frac{1}{2}$ & $\frac{3}{4}$	$4\frac{1}{2}$	$\frac{1}{4}$ & $\frac{3}{8}$	D. P. .30
No. 725B	$\frac{1}{4}$ & $\frac{3}{8}$	$\frac{1}{2}$ & $\frac{3}{4}$	$4\frac{1}{2}$	$\frac{1}{4}$ & $\frac{3}{8}$	D. P. .30
No. 727	$\frac{3}{8}$ & $\frac{1}{2}$	$\frac{3}{4}$ & 1	$5\frac{1}{2}$	$\frac{3}{8}$ & $\frac{1}{2}$	D. P. .37
No. 729	$\frac{1}{2}$ & $\frac{5}{8}$	1 & $1\frac{1}{4}$	$6\frac{1}{2}$	$\frac{1}{2}$ & $\frac{5}{8}$	D. P. .44
No. 731	$\frac{5}{8}$ & $\frac{3}{4}$	$1\frac{1}{4}$ & $1\frac{3}{4}$	$7\frac{1}{2}$	$\frac{5}{8}$ & $\frac{3}{4}$	D. P. .50
No. 733	$\frac{3}{4}$ & 1	$1\frac{3}{4}$ & 2	$8\frac{1}{2}$	$\frac{3}{4}$ & 1	D. P. .65
No. 737	$\frac{7}{8}$ & $1\frac{1}{8}$	$2\frac{1}{4}$ & $2\frac{3}{4}$	$11\frac{1}{2}$	$\frac{7}{8}$ & $1\frac{1}{8}$	D. P. .97

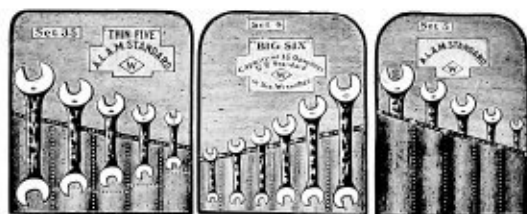
Williams Set Screw Wrenches

22½-Degree Angle, Double Head.



	For Set Screws; Size	Extreme Length	Thickness Heads	Each
No. 523	$\frac{1}{8}$ & $\frac{1}{4}$	$3\frac{1}{2}$	$\frac{1}{8}$	D. P. \$0.23
No. 527	$\frac{1}{4}$ & $\frac{3}{8}$	5	$\frac{1}{4}$	D. P. .30
No. 531	$\frac{3}{8}$ & $\frac{1}{2}$	$6\frac{1}{2}$	$\frac{3}{8}$	D. P. .46
No. 535	$\frac{1}{2}$ & $\frac{5}{8}$	$8\frac{1}{2}$	$\frac{1}{2}$	D. P. .67
No. 539	$\frac{5}{8}$ & $\frac{3}{4}$	$11\frac{1}{2}$	$\frac{5}{8}$	D. P. .97

Williams Wrenches in Sets



"Thin Five"

Automobile Set, "Thin Five," No. 35, with openings milled for A. L. A. M. standard nuts and cap screws.

	A. L. A. M. Nuts and Cap Screws	Openings Milled	Extreme Length	Thickness Heads	Price Semi- Finished
623E	$\frac{1}{8}$ & $\frac{1}{4}$	$\frac{1}{2}$ & $\frac{3}{4}$	$4\frac{1}{2}$	$\frac{1}{8}$ & $\frac{1}{4}$	D. P. \$0.24
626X	$\frac{1}{4}$ & $\frac{3}{8}$	$\frac{3}{4}$ & 1	$5\frac{1}{2}$	$\frac{1}{4}$ & $\frac{3}{8}$	D. P. .31
629E	$\frac{3}{8}$ & $\frac{1}{2}$	1 & $1\frac{1}{4}$	$6\frac{1}{2}$	$\frac{3}{8}$ & $\frac{1}{2}$	D. P. .42
632X	$\frac{1}{2}$ & $\frac{5}{8}$	$1\frac{1}{4}$ & $1\frac{3}{4}$	$8\frac{1}{2}$	$\frac{1}{2}$ & $\frac{5}{8}$	D. P. .56
635G	$\frac{5}{8}$ & $\frac{3}{4}$	$1\frac{3}{4}$ & 2	$10\frac{1}{2}$	$\frac{5}{8}$ & $\frac{3}{4}$	D. P. .74

No. 35 Set, less roll, each.....D.P. \$2.27

No. 35 Williams' Wrench Set, complete with roll, each.....D.P. \$2.70

"Big Six"

Original "Extra Capacity" Set, "Big Six," No. 4, with openings milled for most popular U. S. standard nuts and cap screws.

	For Nuts Diam. Bolts	For Cap Screws Diam. Screw	Openings Milled U. S. Standard	Extreme Length	Thickness Heads	Price Semi- Finished
725	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{2}$ & $\frac{3}{4}$	$4\frac{1}{2}$	$\frac{1}{8}$	D. P. \$0.30
727C	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{4}$ & 1	$5\frac{1}{2}$	$\frac{1}{4}$	D. P. .37
729	$\frac{3}{8}$	$\frac{1}{2}$	1 & $1\frac{1}{4}$	$6\frac{1}{2}$	$\frac{3}{8}$	D. P. .40
731	$\frac{1}{2}$	$\frac{5}{8}$	$1\frac{1}{4}$ & $1\frac{3}{4}$	$7\frac{1}{2}$	$\frac{1}{2}$	D. P. .44
733	$\frac{3}{4}$	1	$1\frac{3}{4}$ & 2	$8\frac{1}{2}$	$\frac{3}{4}$	D. P. .67
736	$\frac{7}{8}$	$1\frac{1}{8}$	$2\frac{1}{4}$ & $2\frac{3}{4}$	$11\frac{1}{2}$	$\frac{7}{8}$	D. P. .96

No. 4 Set, less roll, each.....D.P. \$3.02

No. 4 Williams' Wrench Set, complete with roll, each.....D.P. \$3.53

A. L. A. M. Automobile Set, No. 5, with openings milled for A. L. A. M. standard nuts and cap screws.

	For A. L. A. M. Standard Nuts and Cap Screws	Openings Milled	Extreme Length	Thickness Heads	Price Semi- Finished
723A	$\frac{1}{8}$ & $\frac{1}{4}$	$\frac{3}{8}$ & $\frac{1}{2}$	4	$\frac{1}{8}$	D. P. \$0.24
727C	$\frac{1}{4}$ & $\frac{3}{8}$	$\frac{1}{2}$ & $\frac{3}{4}$	$5\frac{1}{2}$	$\frac{1}{4}$	D. P. .37
731A	$\frac{3}{8}$ & $\frac{1}{2}$	1 & $1\frac{1}{4}$	$7\frac{1}{2}$	$\frac{3}{8}$	D. P. .30
733C	$\frac{1}{2}$ & $\frac{5}{8}$	$1\frac{1}{4}$ & $1\frac{3}{4}$	$8\frac{1}{2}$	$\frac{1}{2}$	D. P. .65
737	$\frac{5}{8}$ & $\frac{3}{4}$	$1\frac{3}{4}$ & 2	$11\frac{1}{2}$	$\frac{5}{8}$	D. P. .97

No. 5 Set, less roll, each.....D.P. \$2.67

No. 5 Williams' Wrench Set, complete with roll, each.....D.P. \$3.17



WRENCHES

Perfect Handle Wrenches



The Perfect Handle Adjustable "S" Wrench is far ahead of the ordinary malleable adjustable "S" wrench and the clumsy drop-forged adjustable all steel "S" wrench that looks identically like the malleable. The perfect handle is the most practical, comfortable and powerful adjustable "S" wrench ever made.

No. 641 Perfect Handle Wrench, 6-inch, each	\$0.85
Dozen...D.P.	\$14.21
No. 641 Perfect Handle Wrench, 8-inch, each	1.10
Dozen...D.P.	\$17.76
No. 641 Perfect Handle Wrench, 10-inch, each	1.25
Dozen...D.P.	\$19.98



No. 642 Perfect Handle Wrench, 6-inch, each	\$0.85
Dozen...D.P.	\$14.21
No. 642 Perfect Handle Wrench, 8-inch, each	1.10
Dozen...D.P.	\$17.76
No. 642 Perfect Handle Wrench, 10-inch, each	1.25
Dozen...D.P.	\$19.98

The "Perfect Handle" Screw Wrench



The drop-forged screw wrench is the strongest, most practical, most comfortable, most salably priced.

Perfect Handle Screw Wrench, 6-inch, capacity 1 1/16, each	\$0.75
Dozen...D.P.	\$10.66
Perfect Handle Screw Wrench, 8-inch, capacity 1 1/4, each	.85
Dozen...D.P.	\$11.99
Perfect Handle Screw Wrench, 10-inch, capacity 1 1/2, each	1.00
Dozen...D.P.	\$14.43
Perfect Handle Screw Wrench, 12-inch, capacity 2 3/16, each	1.25
Dozen...D.P.	\$17.32
Perfect Handle Screw Wrench, 15-inch, capacity 2 1/2, each	2.00
Dozen...D.P.	\$28.86
Perfect Handle Screw Wrench, 18-inch, capacity 3 1/4, each	2.50
Dozen...D.P.	\$36.08
Perfect Handle Screw Wrench, 21-inch, capacity 4, each	3.00
Dozen...D.P.	\$43.29

Stillson Pipe Wrench



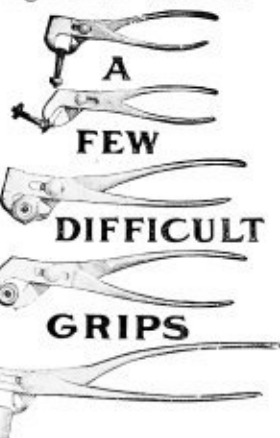
Length open, 6 inches, takes pipe from 1/4 to 1/2 inch, each	\$0.85
Dozen...D.P.	\$15.99
Length open, 8 inches, takes pipe from 1/4 to 3/4 inch, each	.90
Dozen...D.P.	\$15.99
Length open, 10 inches, takes pipe from 1/4 to 1 inch, each	1.00
Dozen...D.P.	\$17.98
Length open, 14 inches, takes pipe from 1/4 to 1 1/2 inch, each	1.25
Dozen...D.P.	\$23.98
Length open, 18 inches, takes pipe from 1/4 to 2 inch, each	1.75
Dozen...D.P.	\$31.97

Bemis & Call Wrench



B. & C. Adjustable S Wrench, 6-inch, each	\$0.70
Dozen...D.P.	\$10.66
B. & C. Adjustable S Wrench, 8-inch, each	.90
Dozen...D.P.	\$13.32
B. & C. Adjustable S Wrench, 10-inch, each	1.20
Dozen...D.P.	\$17.32

Eagle Claw Wrench



The Eagle Claw is the handiest and best tool for all work around an automobile. It never slips on oily, slippery grease cups, and gets a firm grip on set or lag screws, no matter how round or worn the corners may be.

Designed and constructed for use in difficult places where it is impossible to use any other wrench.

Eagle Claw Wrench, 7-inch, each	\$1.25
Dozen...D.P.	\$19.98
Eagle Claw Wrench, 10-inch, each	1.50
Dozen...D.P.	\$26.64



WRENCHES

Adjustable Wrenches



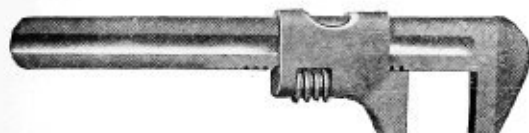
- No. A3 Adjustable Wrench, 6-inch, mottled, each...\$0.20
Dozen...D.P. \$2.45

- No. A3 Adjustable Wrench, 6-inch, bright nickel, each... .25
Dozen...D.P. \$3.33



- No. A6 Adjustable Wrench, 6-inch, mottled, each...\$0.30
Dozen...D.P. \$5.00

- No. A8 Adjustable Wrench, 8-inch, mottled, each... .35
Dozen...D.P. \$5.78



- No. 18 Malleable Adjustable Wrench, 9-inch, blued, each...\$0.25
Dozen...D.P. \$3.33



- No. 19 Malleable Adjustable Wrench, 9½-inch, blued, each...\$0.30
Dozen...D.P. \$4.00

Victor Adjustable Alligator Wrench



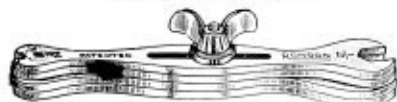
Drop forged of best tool steel.

Combines strength, simplicity and rapidity of adjustment. No springs to break. Can not get out of order. Every part visible.

The movable jaw, which is of the best steel, is interchangeable and may be replaced easily in case of wear or breakage. Length 7 inches.

- No. 365 Full Nickel Plated, each...\$1.00
Dozen...D.P. \$13.32

Ronson Wrenches



(Showing Wrench as it appears closed)

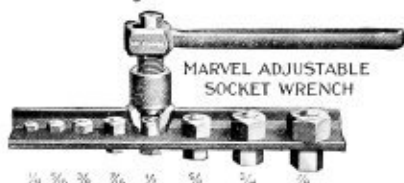
With a Ronson in your kit you need no other wrench. You can carry it in your pocket without inconvenience. Length closed, 6 inches; weight 8 ounces; material, highest quality plate steel, superbly tempered; nut drop forged. Finish, incorrodible nickel.

Sizes—A, 2, 3-16 inch, 9-32 inch, ½ inch; B, 5-16 inch, ¾ inch; C, 11-32 inch, 11-16 inch; D, ¾ inch, 13-16 inch.

Each of the four members is a perfect wrench in itself and can be used separately if necessary.

- Each...\$1.00
Dozen...D.P. \$17.76

Marvel Adjustable Socket Wrench



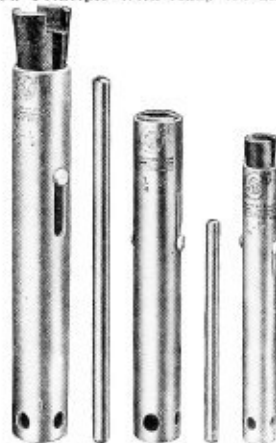
AND ALL INTERMEDIATE SIZES
Spread from ½ to 1 29/32 in.

The Marvel replaces over 32 loose sockets, has a spread of from ½ inch to 1 29/32 inch, and, what's more, it grips the nut tight. You don't have to chisel off nuts which have become slightly worn.

- Each...\$3.00
Each...D.P. \$5.00

The Utility Socket Wrench Set

A New Principle With Many Advantages



7-in., 6-in. and 5-in. Long, Respectively

Has all the advantages of socket wrench sets consisting of fourteen wrenches, with none of their faults. Instant in adjustment. No screws to manipulate or parts to get out of order. Can be applied to all shapes and kinds of nuts immediately. Has many new features possessed by no other wrench.

- Utility Wrench Set complete, packed in neat canvas bag...\$2.50
Each...D.P. \$3.88



SOCKET WRENCHES

Mossberg Wrench Sets

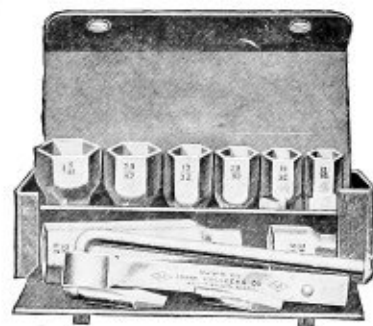


No. 5 Mossberg Socket Wrench Set, primarily for motorcycle and bicycle use, consists of No. 321 offset handle with five thoroughly hardened and guaranteed pressed steel sockets, sizes as follows: 17-32, 19-32, $\frac{5}{8}$, 21-32 and 23-32, in enamel canvas case.

Each \$1.10
Each, D.P. \$1.71

No. 5½ Mossberg Socket Wrench Set for motorcycle or bicycle use consists of one No. 355 ratchet handle and five hex. sockets of the following sizes: 17-32, 19-32, $\frac{5}{8}$, 21-32 and 23-32, in enamel canvas case.

Each \$2.00
Each, D.P. \$5.11



No. 6-B Mossberg Socket Wrench Set is a small but very handy socket for automobiles and motor boats; consists of No. 310 folding handle, two sizes of screw driver bits and seven hex. sockets of the following sizes: 17-32, 19-32, 21-32, 23-32, 13-16, 29-32 and 1 3-32 and one special

spark plug socket 29/32x4 inches, packed in leather case.
Each \$3.00
Each, D.P. \$3.44

No. 7 Mossberg Socket Wrench Set has fifteen sockets and two handles, as follows: Offset socket wrench handle No. 329, ten-inch; take-down "T" socket wrench handle No. 340, ten-inch; one 29/32 hexagon spark plug socket four inches long, and hex sockets as follows: 13-32, 15-32, 17-32, 19-32, $\frac{5}{8}$, 21-32, 23-32, 25-32, 13-16, 27-32, 29-32, 1-inch, 11-32, 13-32, packed in wood box.

Each \$3.00
Each, D.P. \$4.47



Mossberg Wrench Sets



No. 11 Mossberg Socket Wrench Set for all-around motor work; includes a No. 350 ratchet handle and extension tube No. 351 9½ inches long, one 29-32 hexagon spark plug socket and the following hex. sockets: 13-32, 15-32, 17-32, 19-32, $\frac{5}{8}$, 21-32, 25-32, 13-16, 17-32, 29-32, 1, 11-32

13-32, in wood box.

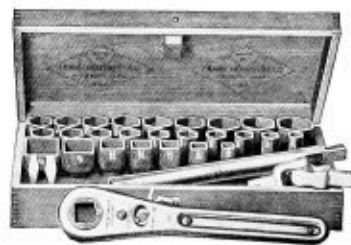
Each \$4.50
Each, D.P. \$7.00

No. 16 Mossberg Universal Small Car Wrench Set; has one No. 350 handle, one tubular extension No. 351, one universal joint No. 336, one screw driver bit, one spark



plug socket 29-32, and hex. sockets as follows: 17-32, 19-32, 21-32, 23-32, 25-32, 27-32, 29-32, 31-32, 19-32, also square sockets 13-32, 15-32, 17-32, 21-32, packed in black fiber case.

Each \$6.00
Each, D.P. \$9.33



No. 9 Mossberg Socket Wrench Set; an ideal set for factory work; has a No. 350 ratchet handle, extension bar No. 351, universal joint No. 336, screw driver bits and hex. sockets as follows:

15-32, $\frac{1}{2}$, 17-32, 19-32, $\frac{5}{8}$, 21-32, 11-16, 23-32, 25-32, 13-16, 27-32, $\frac{3}{4}$.

29-32, 31-32, 1, 11-32, 13-32, 15-32, 19-32, also square sockets 13-32, 17-32, 19-32, 21-32, 25-32, 11-32, 15-32, packed in wooden box.

Each \$7.00
Each, D.P. \$10.88

No. 10 Mossberg Socket Wrench Set; an efficient set for repair and garage work; has No. 350 ratchet handle, extension bar No. 351, universal joint No. 336, two screw driver bits, two spark plug sockets 29-32 and 15-32, fitting standard plugs, and the following hex. sockets: 15-32, $\frac{1}{2}$, 17-32, 19-32, $\frac{5}{8}$, 21-32, 11-16, 23-32, 25-32, 13-16, 27-32, $\frac{3}{4}$, 29-32, 31-32, 11-32, 13-32, 15-32, 19-32, packed in wooden box.

Each \$8.00
Each, D.P. \$12.44





SOCKET WRENCHES

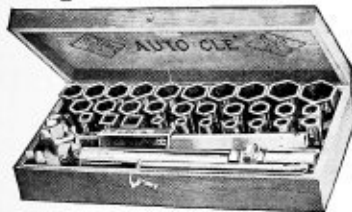
Mossberg Wrench Set



No. 14 Mossberg Socket Wrench Set is the largest and most complete socket wrench set ever offered to the trade. Has No. 350 handle and No. 340 take-down handle, No. 320 offset wrench, No. 100 nickel plier and Gripall pipe wrench No. 470, No. 1 general service double end wrench set with ten different openings and universal joints, three special spark plug sockets, three screw driver bits and cotter pin extractors and hex. sockets as follows: 5-16, $\frac{3}{8}$, 13-32, 7-16, 15-32, $\frac{1}{2}$, 17-32, 19-32, 21-32, 11-16, 23-32, 25-32, 13-16, 27-32, $\frac{3}{4}$, 29-32, 31-32, 1, 11-32, 13-32, 15-32, 19-32. Also square sockets as follows: 13-32, 15-32, 17-32, 19-32, 21-32, 23-32, 25-32, 29-32, 31-32, 15-32, 19-32, in wooden box.

Each \$12.00
Each...D.P. \$18.65

Large Auto Cle Socket Wrench Set No. 1



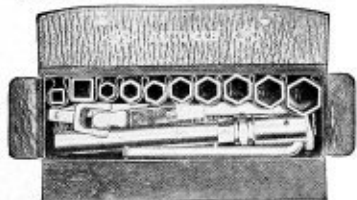
The dean of all socket wrenches—Auto Cle is offered for the help and assistance of automobile mechanics, machinists and car owners as most sensible. There are no inaccessible adjustments if you have Auto Cle. Consists of 31 Mossberg guaranteed sockets (steel), hex. 5-16, 11-32, $\frac{3}{8}$, 7-16, 15-32, $\frac{1}{2}$, 17-32, 9-16, 19-32, $\frac{3}{4}$, 21-32, 11-16, 23-32, $\frac{3}{4}$, 25-32, 13-16, 27-32, $\frac{3}{4}$, 29-32, 15-16, 31-32, 1, 11-32, 13-32, 15-32, 19-32. Square 13-32, 17-32, 21-32. Spark plug socket 29-32x4 inches. "Auto Cle" take-down, reversible, ratchet handle (nickel plated). Long extension bar (9 $\frac{1}{2}$ inches). Short extension connection bar (1 $\frac{1}{2}$ inches). Universal joint (permits making adjustments "around a corner"). Two sizes screw driver bits.

Large Auto Cle Socket Wrench Set \$10.00
Each...D.P. \$15.54

For its size and price arrangement of socket wrenches made; this small Auto Cle Set is guaranteed completely. In flexible leather case containing: One take-down reversible ratchet handle, nickel plated; one swivel or universal joint, which permits using the wrench at any angle; one 9 $\frac{1}{2}$ -inch extension bar; one 1 $\frac{1}{2}$ -inch extension bar; two sizes of screw driver bits; twelve guaranteed steel sockets: hex. 15-32, 17-32, 19-32, 21-32, 23-32, 13-16, 29-32, 1 3-32; square 13-32, 17-32, 21-32; spark plug socket 29-32, 4 inches long.

No. 2 Small Auto Cle Set, each \$7.50
Each...D.P. \$11.66

Small Auto Cle Set No. 2



Mossberg Pressed Steel Sockets



Mossberg Hexagon Sockets, all sizes, each \$0.20
Mossberg Square Sockets, all sizes, each20
Dozen...D.P. \$3.11

No. 322 Double End Offset Wrench Handle. Is very cleverly arranged so that sockets shall firmly stay put until you desire to remove them. A ball spring friction does the trick. Ten inches long, finest steel and thoroughly hardened.
Each \$0.25
Each...D.P. \$0.40



No. 320 Mossberg Socket Handle is the simplest and least expensive handle for sockets manufactured. Sockets are held in place by ball friction.
Each \$0.20
Each...D.P. \$0.31

No. 310 Mossberg Folding Socket Wrench Handle makes a convenient wrench for automobile and other light work. The upright bar is 5 $\frac{1}{2}$ inches long and the handle 6 inches.

Each \$0.40
Each...D.P. \$0.62



No. 350 Mossberg Ratchet Socket Wrench Handle simplifies adjustments to a point that impresses the user with its cleverness.

Each \$2.00
Each...D.P. \$3.11

No. 355 Mossberg Ratchet Socket Handle offers a fine but inexpensive ratchet socket handle for use with all standard sockets. The socket shank fits square opening and is firmly held by tension spring. This tool is reversible by simply turning it over.

Each \$1.00
Each...D.P. \$1.56



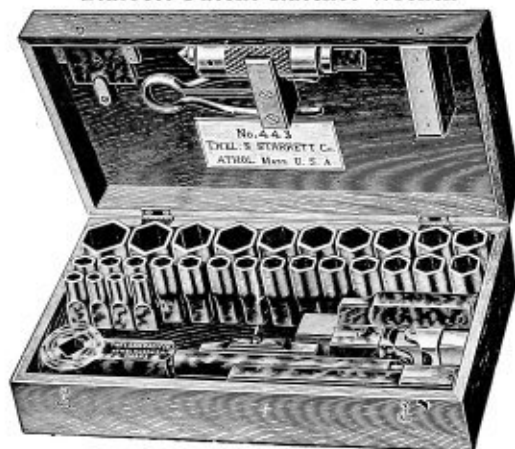
No. 260 Mossberg Socket Brace for demountable rim and general use. Is made of finest steel, satin nickel plated, with chiseled wood handle and top 13 inches over all. Socket wrenches of any size may be had for use with this wrench, but sockets are not included in the price.

Each \$0.30
Each...D.P. \$0.47



STARRETT TOOLS

Starrett Patent Ratchet Wrench



No. 443

This wrench is made from drop forged and other steel—all finished in a workmanlike manner, case hardened and strong where strength is needed, yet light and convenient to handle. The ratchet can be instantly reversed by simply rotating between thumb and finger the stem end of the dog in the end of the handle half a turn. Hexagon drawn steel sockets varying by 32ds from 5/16 in. to 1 1/4 in. have duplicate shanks to fit the square opening through the ratchet head, also the end of a square extension piece which fits the ratchet where they are frictionally held.

No. 443 A, price complete \$15.00
Each.....D.P. \$27.75



Pocket Steel Tapes

No. 500

These tapes are 1/2 inch wide, in well-finished nickel plated cases with rounded edges. Spring wind with center stop. Graduated in inches and sixteenths of an inch.

	Diameter Inches	Each
No. 500 Steel Tape, 60-inch.....	1 1/4	\$0.75
Each.....D.P. \$1.33		
No. 500 Steel Tape, 72-inch.....	1 11/16	.80
Each.....D.P. \$1.45		
No. 500 Steel Tape, 96-inch.....	1 13/16	1.15
Each.....D.P. \$2.00		

Flexible Rules

These are very thin spring tempered rules, nicely graduated on one side only. Those from 1 in. to 12 in. are 1/2 in. wide, and will easily conform to a 2 in. circle.

No. 320 Flexible No. 10 graduations (32nds and 64ths), 6-inch, each \$0.65
Each.....D.P. \$1.16



Spring-Tempered Rules

With Graduated End



No. 303, 6-inch, each \$0.65
Each.....D.P. \$1.16
No. 303, 12-inch, each \$1.25
Each.....D.P. \$2.22

No. 303 has No. 4 graduations and is graduated in 32ds of an inch on opposite sides of one end.

Improved Hook Rules

Very convenient in taking measurements from round corners, through hubs of pulleys, setting inside calipers, etc. The 6-inch may be carried in the pocket. The hook can be quickly removed by turning eccentric stud one-half around.



No. 419 Improved Hook Rules, 6-inch, each \$1.00
Each.....D.P. \$1.78

No. 419 Improved Hook Rules, 12-inch, each 1.75
Each.....D.P. \$3.11

Narrow Hook Rules



These rules are designed for use in taking measurements through small holes where our regular hook rules cannot be used. They can also be used for setting inside calipers, etc. Measurements through holes as small as 3/8 inch can be obtained. The rules are graduated one side in 32ds and the other in 64ths of an inch.

No. 422 Narrow Hook Rules, 6-inch, each \$0.90
Each.....D.P. \$1.60

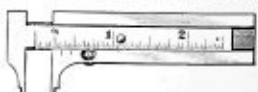
No. 422 Narrow Hook Rules, 12-inch, each 1.50
Each.....D.P. \$2.67

Pocket Slide Calipers

No. 425

Graduated in 32ds and 64ths. The improved clamping device is a valuable feature.

No. 425 Pocket Slide Calipers, 5-in., ea. \$3.00
Each.....D.P. \$5.55



Thickness Gauge

Nos. 172A and 172B

Has leaves, viz.: .002, .003, .004, .006, .008, .010, .012, .015. The leaves are tempered, and have the thickness marked upon them.



No. 172-B. Case 4 1/2 in. long by 1/2 in. wide; leaves 4 1/2 in. long by 1/2 in. wide; each \$1.50
Each.....D.P. \$2.67

No. 172-A. Case 3 1/2 in. long by 1/2 in. wide; leaves 3 1/2 in. long by 1/2 in. wide. Has same leaves as 172-B and .0015 in addition, each 1.00
Each.....D.P. \$1.78

Center Gauges

For use in grinding and setting screw cutting tools.



No. 390. Not tempered, graduated one corner, each in 32ds, 24ths, 20ths and 14ths; each \$0.25
Each.....D.P. \$0.47

No. 391. Spring Tempered, each35
Each.....D.P. \$0.67



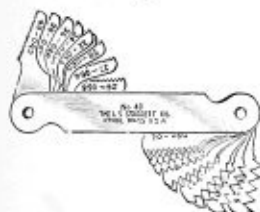
STARRETT TOOLS

Improved Screw Pitch Gauge

No. 40

The gauge has twenty-two pitches, viz: 9, 10, 11, 11½, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40.

This gauge can be used inside a nut as well as on the outside of a screw or bolt.



No. 40 Screw Pitch Gauge, each.....\$1.00
Each.....D.P. \$1.89

Screw Pitch Gauge

No. 4

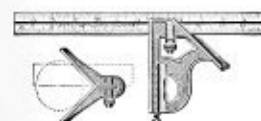
Has the following pitches: 4, 4½, 5, 5½, 6, 7, 8, 9, 10, 11, 11½, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30. The teeth are sharp and clean cut. Like our No. 40 it can be used inside of a nut as well as on outside of a screw or bolt. It is also a convenient and reliable tool to use as a 60-degree center gauge and to test the grinding of either an inside or outside threading tool.



No. 4 Screw Pitch Gauge, each.....\$1.25
Each.....D.P. \$2.33

Starrett Patent Combination Square

No. 11 With Hardened Blade



Every tool warranted accurate. With the adjustable scale this forms one of the most convenient and useful tools ever devised for mechanic's use. It is a complete substitute for a whole set of common try squares, and is one of the best gauges made for transferring exact measurements or laying out work. It is also convenient for a depth gauge, or to square in a mortise. For a miter it is perfect, while with the auxiliary center head it forms a centering square, both inside and outside, which for convenience and accuracy has no equal. The blades are hardened and graduated with heavy figures, reading both ways.

No. 11 Combination Square, 6-inch, with center head, each.....\$1.50

Each.....D.P. \$2.67

No. 11 Combination Square, 12-inch, with center head, each.....\$2.00

Each.....D.P. \$3.56

Starrett Micrometer

No. 3—1 inch

Starrett Micrometer No. 3, 1-inch, polished steel, for measurement by thousandths up to one inch, with lock nut and ratchet stop; length 4½ inches.

No. 3 Starrett Micrometer, 1-inch, each.....\$6.00
Each.....D.P. \$10.66



Starrett Micrometer

No. 2—2 inch



Polished steel, for measurement by thousandths from one inch to two inches; with lock nut, ratchet stop and one-inch test gauge; length, 5½ inches.

No. 2 Starrett Micrometer, 2-inch, each.....\$6.50
Each.....D.P. \$11.55

High Speed Indicator

No. 101



This indicator may be run at highest speed required without heating, and this on account of our frictionless bearing against which the inner end of the spindle revolves (a feature patented by us).

The working parts of this instrument are encased, and the dial plate has two rows of figures, reading right or left, as the shaft may run.

No. 104 Speed Indicator, each.....\$1.00
Each.....D.P. \$1.78

Registering Speed Indicator

No. 107

This instrument was devised to automatically register hundreds as well as units and tens, and thus relieve the mind from keeping tally; also to furnish a better registering indicator at a more reasonable cost than has been on the market heretofore. The instrument will register 5,000 revolutions. The large dial is graduated into one hundred lines, each one representing a revolution of the spindle. The small dial has fifty lines cut upon its face, each representing one hundred revolutions of the spindle (or one complete turn of the large dial). Nickel plated.

No. 107 Speed Indicator, each.....\$3.00
Each.....D.P. \$5.33



English Standard Wire Gauge

No. 189



No. 189 Wire Gauge, takes Nos. 6 to 36, each.....\$1.50
Each.....D.P. \$2.67

Time Saver Drill, Tap and Steel Wire Gauge

No. 185



By the use of this gauge one is enabled to select at once the right sized drill to suit machine screw tap most commonly used, leaving just stock enough for the tap to cut as near a full thread as is practicable for one tap without breaking it, thus saving much time and uncertainty of result attending the former crude ways of making a selection.

No. 185 Wire Gauge, each.....\$1.75
Each.....D.P. \$3.11



STARRETT TOOLS

Outside Thread Calipers

No. 179

These calipers are designed for measuring the diameter at bottom of threads on the outside of screws.

Sent with solid nut unless otherwise ordered.

No. 179 Outside Thread Calipers, 4-inch, with solid nut, each.....\$0.75
Each..D.P. \$1.33

No. 179 Outside Thread Calipers, 6-inch, with solid nut, each..... .85
Each..D.P. \$1.51

No. 179 Outside Thread Calipers, 4-inch, with spring nut, each.... .90
Each..D.P. \$1.60

No. 179 Outside Thread Calipers, 6-inch, with spring nut, each.... 1.00
Each..D.P. \$1.67



Yankee Outside and Inside Calipers



The Yankee Calipers and Dividers are manufactured under the Fay patents, but are not quite so heavy as the Fay and cost less. They are much liked, and on account of price are preferred by many to the higher priced tools.

All sizes are supplied with either solid or quick adjusting nut.

No. 73 represents a new Yankee Inside Transfer Caliper with either spring or solid nut. The bow is stiff, making the caliper reliable. After caliper inside of chambered cavity by springing in the legs they may be withdrawn, and as they spring back will show the exact size calined.

No. 79 Yankee Outside Calipers, 3-inch, with solid nut.....\$0.70
Each..D.P. \$1.16

No. 79 Yankee Outside Calipers, 6-inch, with solid nut.... .85
Each..D.P. \$1.42

No. 79 Yankee Outside Calipers, 3-inch, with spring nut... .85
Each..D.P. \$1.42

No. 79 Yankee Outside Calipers, 6-inch, with spring nut... 1.00
Each..D.P. \$1.67

No. 73 Yankee Inside Calipers, 3-inch, with solid nut.... .70
Each..D.P. \$1.16

No. 73 Yankee Inside Calipers, 6-inch, with solid nut.... .85
Each..D.P. \$1.42

No. 73 Yankee Inside Calipers, 3-inch, with spring nut... .85
Each..D.P. \$1.42

No. 73 Yankee Inside Calipers, 6-inch, with spring nut... 1.00
Each..D.P. \$1.67

Improved Firm Joint Calipers

Nos. 26 and 27



The improvements in these calipers consists in the construction of the joint, which is so made as to be drawn together by means of a screw. The main stud is squared and fitted to one leg, thus preventing the stud from turning when loosening and tightening, and insures a smooth and uniform friction of more or less tension to suit the user.

The quality of these calipers is incomparably superior to that of any old style.

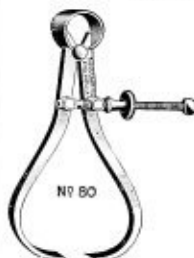
No. 26 Firm Joint Calipers, 6-inch, each.....\$0.65
Each..D.P. \$1.11

No. 26 Firm Joint Calipers, 8-inch, each..... .80
Each..D.P. \$1.33

No. 27 Firm Joint Calipers, 6-inch, each..... .65
Each..D.P. \$1.11

No. 27 Firm Joint Calipers, 8-inch, each..... .80
Each..D.P. \$1.33

Yankee Thread Calipers



No. 80 Yankee Thread Calipers, 4-inch, with solid nut, each.....\$0.75
Each..D.P. \$1.33

No. 80 Yankee Thread Calipers, 4-inch, with spring nut, each.... .90
Each..D.P. \$1.56

Cut Nipper

No. 199

For bicycle spokes, etc.

This nipper combines great power with rigidity. Wire can be cut at either extreme end of the jaws.

The cutting jaws conform to the inside of a bicycle rim and will cut off the spokes just as close as required.

All our nippers are tested before leaving the factory. All parts are interchangeable, so that in case a jaw breaks a new one can be obtained.

In ordering extra jaws, specify as per cut which jaw is wanted.

No. 199 Cut Nippers, 5-inch, each.....\$1.50
Each..D.P. \$2.89



Adjustable Jaw Cut Nipper

No. 1



The jaws are detachable, so that they can be removed, ground, and adjusted when they have become worn. Each jaw can be ground away to the extent of $\frac{1}{4}$ -inch, remaining as good as new for practical use; and when used up, if ever, new jaws can be procured.

No. 1 Adjustable Jaw Cut Nippers, $\frac{5}{16}$ -inch, each\$2.00
Each..D.P. \$4.00



STARRETT TOOLS

Nickel Plated Pocket Level



No. 135

Nickel Plated Pocket Level, each.....\$0.50
Each...D.P. \$0.89

Machinist's Center Punch



No. 117

Made to supply the demand for a better article than has heretofore been on the market. Made of fine steel, neatly shaped, with both ends tempered and points nicely ground. Length of each size, 4 inches. Diameter, A 5/64 inch, B 3/32 inch, C 9/64 inch, D 5/32 inch.

A larger size, E, is made for heavy work; length 5 inches, diameter 1/4 inch, diameter of knurled part 1/2 inch.

No. 117 Machinist's Center Punch, any size, each.....\$0.20
Each...D.P. \$0.30

Nail Set



No. 116

Made of fine grade of steel, both ends hardened, centers nicely knurled, tips concaved, tops oval, and the size just right.

Length of each size 4 inches. Diameter at tip, A 1/16 inch, B 3/32 inch, C 1/8 inch, D 5/32 inch.

No. 116 Nail Set, any size, each.....\$0.10
Each...D.P. \$0.18

Automatic Adjustable Stroke Center Punch



No. 18A

This center punch (patent applied for) is provided with knurled adjustable screw cap, which, working in connection with a spring, regulates the stroke. For work requiring a heavy mark, turn cap down; for work requiring a light mark, turn it up. To use it no hammer is needed. The punch being placed in an upright position over the working line, a downward pressure releases the striking block and makes the impression without danger of slipping, as is liable when a hammer is used.

No. 18A Adjustable Stroke Center Punch, each.....\$2.00
Each...D.P. \$4.00

Pocket Screw Driver



No. 553

This tool is made from steel tubing, knurled and nickel plated. The butt of the blade fits a solid lock in the tube, preventing it from turning, and is held from coming out by a slight turn of the chuck.

To carry in pocket, reverse the blade, inserting it in the handle, giving a slight turn of the chuck to keep it there. It takes no more room in the pocket than a penknife.

The screw driver blades are properly tempered.

No. 553 A Pocket Screw Driver, handle 1/4 inch diameter, blade 1 1/2 inches long, weight 1/2 oz., each.....\$0.25
Each...D.P. \$0.49

No. 553 B Pocket Screw Driver, handle 3/8 inch diameter, blade 3 inches long, weight 1 1/2 oz., each......35
Each...D.P. \$0.67

Electrician's Pocket Screw Driver

No. 560



The handle is covered with hard rubber for insulation from electrical currents and is nicely ribbed so as to insure a firm grip when using the tool. It has four blades of different widths, any of which may quickly be taken from the telescope handle and inserted in the end, where it is automatically locked and firmly held for use.

The widths of the blades are 3/32 inch, 5/32 inch, 1/4 inch and 3/8 inch.

No. 560 Pocket Screw Driver, each.....\$1.50
Each...D.P. \$2.67

Starrett Hack Saws

No. 103. With Common Teeth, 18 to the Inch, for General Use in Hand Frames.

The 8-inch saws are 7/16 inch wide, .022 inch thick; the 10 and 12-inch are 1/2 inch wide, .025 inch thick.

Length	8-in.	10-in.	12-in.
Per dozen	\$0.70	\$0.85	\$1.00
Dozen...D.P.	\$1.11	\$1.33	\$1.56



No. 102. With Fine Teeth, 24 to the Inch, for Use in Hand Frames, on Tubing, etc.

For sawing tubing, brass, copper and sheet metal. The 8-inch are 7/16 inch wide, .022 inch thick.

Length	8-in.	10-in.	12-in.
Per dozen	\$0.70	\$0.85	\$1.00
Dozen...D.P.	\$1.11	\$1.33	\$1.56

No. 253. With Extra Fine Teeth, 32 to the Inch, for Use in Hand Frames, on Thin Metals, etc.

For sawing thin sheet metal and tubing. The 8-inch are 7/16 inch wide, .022 inch thick.

Length	8-in.	10-in.	12-in.
Per dozen	\$0.70	\$0.85	\$1.00
Dozen...D.P.	\$1.11	\$1.33	\$1.56



No. 252. Flexible Back with Fine Teeth, 24 to the Inch, for Use in Hand Frames, on Tubing, etc.

For sawing tubing, brass, copper and sheet metal. The 8-inch are 7/16 inch wide, .022 inch thick.

Length	8-in.	10-in.	12-in.
Per dozen	\$0.70	\$0.85	\$1.00
Dozen...D.P.	\$1.11	\$1.33	\$1.56

No. 258. Flexible Back with Extra Fine Teeth, 32 to the Inch, for Use in Hand Frames, on Thin Metal, etc.

For sawing thin sheet metal and tubing. The 8-inch are 7/16 inch wide, .022 inch thick.

Length	8-in.	10-in.	12-in.
Per dozen	\$0.70	\$0.85	\$1.00
Dozen...D.P.	\$1.11	\$1.33	\$1.56



No. 112. With Common Teeth, 18 to the Inch, for General Use in Power Machines or Hand Frames.

The No. 112 saws are 3/4 inch wide, .030 inch thick. Experience has taught us that these blades are of the correct width and thickness for general use either in power machines or hand frames.

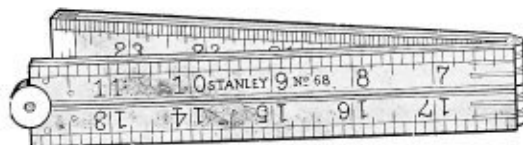
Length	10-in.	12-in.
Per dozen	\$0.85	\$1.05
Dozen...D.P.	\$1.33	\$1.56



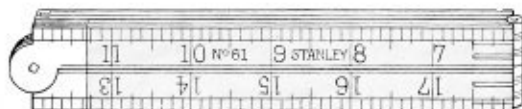


RULES AND BAGS

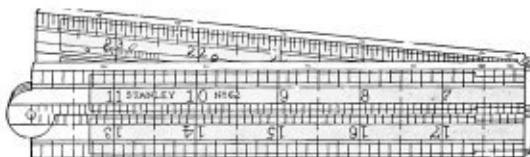
Stanley Rules



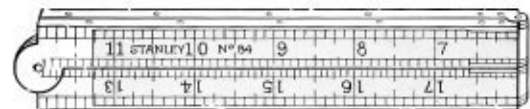
No. 68 Two feet, four-fold, round joint, middle plates, 8ths and 16ths, 1 inch wide, each.....\$0.25
Dozen, D.P. \$2.67



No. 61 Two feet, four-fold, square joint, middle plates, 8ths and 16ths, 1 inch wide, each.....\$0.30
Dozen, D.P. \$3.47



No. 62 Two feet, four-fold, square joint, full bound, 8ths, 10ths, 12ths, 16ths, and drafting scales, 1 inch wide, each.....\$0.65
Dozen, D.P. \$9.33

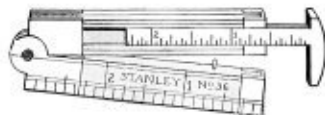


No. 81 Two feet, four-fold, square joint, half-bound, 8ths, 10ths, 12ths, 16ths, and drafting scales, 1 inch wide, each.....\$0.50
Dozen, D.P. \$8.00

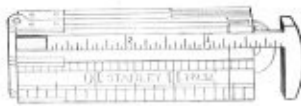


No. 69 One foot, four-fold, round joint, middle plates, 8ths and 16ths, 3/8 inch wide, each.....\$0.15
Dozen, D.P. \$2.22

No. 36 Square joint, two-fold, 6-inch, 8ths, 16ths, 12ths and 16ths, with caliper, price each.....\$0.10
Dozen, D.P. \$1.33



No. 32 Arch joints, edge plates, four-fold, 12-inch, 8ths, 16ths, 12ths and 16ths, with caliper, price each.....\$0.60
Dozen, D.P. \$8.00



Mechanic's Tool Bag



A very strong and well-made bag, with lock and key. Just the thing for the auto repair man.
Each.....\$2.50
Each, D.P. \$3.89

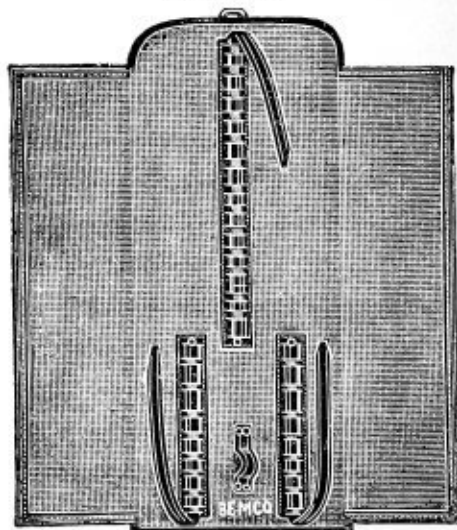
Security Tool Bag



The Security Tool Bag is positively the most convenient tool bag ever made. When the bag is opened all the tools come into plain sight so you can pick up just the tool you want to use. When it is closed there is no possible chance for the tools to get out of it. Instantly accessible. Instantly put away. It is made of heavy cotton duck fabric and will last a lifetime.

Each.....\$1.25
Each, D.P. \$2.09

Tool Roll



No. 30-A Tool Roll, holds 30 tools, each.....\$2.10
Each, D.P. \$2.56
No. 24-A Tool Roll, holds 24 tools, each.....1.65
Each, D.P. \$2.22
No. 12-A Tool Roll, holds 12 tools, each.....1.35
Each, D.P. \$1.56



PUNCHES AND CHISELS

Solid Punches



No. 291 Solid Punches; these punches are made of high quality Octagon Tool Steel; blue finish, very attractive; length six inches; sizes as shown below; each.....\$0.20
Dozen...D.P. \$2.67



No. 24 Octagon Pick Punches; these punches are made of high quality Octagon Tool Steel; blue finish, very attractive; $4\frac{1}{2}$ inches long, $\frac{5}{16}$ -inch stock, each.....\$0.15
Dozen...D.P. \$1.89



No. 23 Octagon Center Punches; these punches are made of high quality Octagon Tool Steel; blue finish, very attractive; size $\frac{5}{16}$ -inch, each.....\$0.15
Dozen...D.P. \$1.89



No. 330 Cold Chisels; made of highest grade hammered crucible steel. These chisels are sold by face size.

$\frac{1}{4}$ x5-inch, made from $\frac{1}{4}$ -inch stock, each.....	\$0.20
Dozen...D.P. \$2.00	
$\frac{5}{16}$ x5-inch, made from $\frac{5}{16}$ -inch stock, each.....	.20
Dozen...D.P. \$2.00	
$\frac{3}{8}$ x5-inch, made from $\frac{3}{8}$ -inch stock, each.....	.25
Dozen...D.P. \$2.22	
$\frac{1}{2}$ x6-inch, made from $\frac{1}{2}$ -inch stock, each.....	.30
Dozen...D.P. \$2.89	
$\frac{5}{8}$ x6 $\frac{1}{2}$ -inch, made from $\frac{5}{8}$ -inch stock, each.....	.35
Dozen...D.P. \$3.55	



No. 331 Round Nose Chisels; made of highest grade hammered crucible steel.

$\frac{5}{16}$ x5-inch, each.....	\$0.20
Dozen...D.P. \$2.00	
$\frac{3}{8}$ x5-inch, each.....	.20
Dozen...D.P. \$2.00	
$\frac{1}{2}$ x6-inch, each.....	.25
Dozen...D.P. \$2.89	
$\frac{5}{8}$ x6 $\frac{1}{2}$ -inch, each.....	.30
Dozen...D.P. \$3.33	



No. 332 Diamond Point Chisels; made of the highest grade hammered crucible steel.

$\frac{5}{16}$ x5-inch, each.....	\$0.20
Dozen...D.P. \$2.22	
$\frac{3}{8}$ x5-inch, each.....	.20
Dozen...D.P. \$2.45	
$\frac{1}{2}$ x6-inch, each.....	.25
Dozen...D.P. \$3.00	
$\frac{5}{8}$ x6 $\frac{1}{2}$ -inch, each.....	.30
Dozen...D.P. \$4.11	



No. 333 Cape Chisels; made of highest grade hammered crucible steel.

$\frac{5}{16}$ x5-inch, each.....	\$0.20
Dozen...D.P. \$2.00	
$\frac{3}{8}$ x5-inch, each.....	.20
Dozen...D.P. \$2.45	
$\frac{1}{2}$ x6-inch, each.....	.25
Dozen...D.P. \$3.00	
$\frac{5}{8}$ x6 $\frac{1}{2}$ -inch, each.....	.30
Dozen...D.P. \$4.11	

Revolving Punch



No. 18 Revolving 4 Tube Spring Punch, forged steel, high grade in quality and finish, knurled handles, each.....\$1.00
Dozen...D.P. \$13.32

Wiss Tinner's Steel Snips



Tinner's Snips, 2-inch cut, each.....	\$1.50
Dozen...D.P. \$17.52	
Tinner's Snips, 3-inch cut, each.....	2.00
Dozen...D.P. \$26.64	

The Necessity Tire Chain Repair Tool



End of jaws (as shown in cut) shows position of hooks when opening; inside of jaws close to handle, for closing position.

With the Necessity Tire Chain Repair Tool a repair can be made in a few seconds. A broken cross chain removed and a new one inserted in less than one minute, while the chain is on the wheel, and without deflating the tire or soiling the hands. This tool is so constructed that an enormous pressure is brought to bear on the chain links with very little effort.

Each	\$1.50
Each...D.P. \$2.22	

McKaig Chain Tool



Opening the Link



Closing the Link

McKaig Combination Chain Tool and Cutter will remove broken cross chains quicker than any other chain tool made. Easiest to operate. Combines opening, closing and cutting. Satisfaction guaranteed.

Price	\$1.00
Each...D.P. \$1.56	



MILLER'S FALLS TOOLS

No. 772 Brace



10-Inch Sweep

Polished and nicked steel; cocobolo wood.
Ball-bearing head and chuck shell.
Sweep handle with inserted brass rings.
Patent cup washer (F) and screw (E) to hold chuck to sweep without working loose.

Forged steel jaws, holding positively and securely, and centering with reasonable accuracy round shanks from $\frac{1}{4}$ to $\frac{1}{2}$ inch in diameter, No. 1 Morse taper and all sizes of bit stock and expansion bit shanks.

No. 772 Brace, each.....\$4.00
Each...D.P. \$4.44

No. 730 Brace



11-Inch Sweep

Polished and nicked steel; cocobolo wood.
Ball-bearing head.
Sweep handle with inserted steel rings.
Patent cup washer (F) and screw (E) to hold chuck to sweep without working loose.

Forged steel jaws, holding positively and securely, and centering with reasonable accuracy round shanks from $\frac{1}{4}$ to $\frac{1}{2}$ inch in diameter, No. 1 Morse taper and all sizes of bit stock and expansion bit shanks.

No. 730 Brace, each.....\$4.25
Each...D.P. \$4.66

No. 32 Brace



10-Inch Sweep

Polished and nicked steel; cocobolo wood.
Ball-bearing head.
Sweep handle with inserted steel rings.
Patent cup washer (F) and screw (E) to hold chuck to sweep without working loose.

Forged steel alligator jaws holding bit stock and many sizes of round and irregular shanks.

No. 32 Brace, each.....\$3.25
Each...D.P. \$3.55

No. 1322 Brace



10-Inch Sweep

Polished and nicked steel; ebonized heads and handles; steel clad head.
Forged steel alligator jaws.
Brass rings inserted in sweep handle.
Friction washer beneath the quill in head.

No. 1322 Brace, each.....\$2.25
Each...D.P. \$2.44

No. 422 Brace



10-Inch Sweep

Nickel; stained hardwood heads and handles.
Steel sweeps and jaw sockets. Alligator jaws of malleable iron; open ratchet.

No. 422 Brace, each.....\$1.75
Each...D.P. \$1.88

No. 162 Brace



10-Inch Sweep

Metal parts polished; stained hardwood.
Steel sweeps and jaw sockets.
Malleable alligator jaws. Ring ratchet.

No. 162 Brace, each.....\$1.10
Each...D.P. \$1.22

No. 222A Brace



10-Inch Sweep

Polished and nicked steel; stained hardwood; steel clad head.
Brass rings inserted in sweep handle.
Forged steel alligator jaws.

No. 222A Brace, each.....\$1.60
Each...D.P. \$1.76

Automatic Star Pocket Borer

No. 8

Handsomely knurled and nicked steel.

May be compressed into convenient size for the pocket.

Magazine handle, containing 8 drill points, ranging from 1/16 to 11/64 inch in diameter, and a screw driver bit.

Device for releasing a bit from handle without disturbing the others.

Screw driver bit to be used when tool is compressed.

Chuck with positive grip.

Length, extended, 7 1/4 inches; compressed, 4 1/2 inches.

No. 8 Star Pocket Borer, each.....\$3.00
Each...D.P. \$3.32





MILLER'S FALLS TOOLS

No. 04 Hand Drill



Black enameled, cast iron frame and gears.
Steel spindle.

Nickel chuck.

Drills range from 1/16 to 11/64 inch in diameter, are for boring in wood and soft metal and are put up in a wooden box. Length, 8 inches.

No. 04 Hand Drill, each.....\$1.50
Each..D.P. \$1.66



No. 03 Hand Drill

Stained hardwood; solid steel frame.

Bright metal parts nickeled.

Detachable hollow end handle with receptacle for twist drills.

Detachable side, grip handle.

Cut gears, with idler gear to equalize bearings.

Three-jawed chuck holding round shanks from 0 to 3/16 inch in diameter. Length, 11 inches.

No. 03 Hand Drill, each.....\$2.50
Each..D.P. \$2.77

No. 3 Hand Drill



The same as No. 03, except that it does not have the small idler gear.

No. 3 Hand Drill, each.....\$2.50
Each..D.P. \$2.66



No. 105 Hand Drill

Cocobolo wood; malleable iron frame; bright metal parts nickeled.

Hollow end handle with screw cap, containing 8 wood boring points, ranging in size from 1/16 to 11/64 inch in diameter.

Removable side, grip handle.

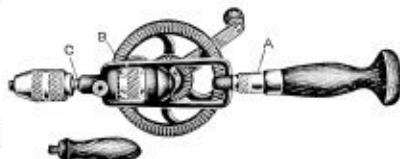
Cut gears; large gear with wide rim, idler gear to equalize bearings. Ball thrust bearing.

Three-jawed chuck holding, and centering accurately, round shank drills from 0 to 3/16 inch in diameter.

Length, 12 1/4 inches.

No. 105 Hand Drill, each.....\$3.25
Each..D.P. \$3.55

No. 98 Hand Drill



Stained hardwood handles; malleable iron frame; bright metal parts nickeled.

Hollow end handle for holding twist drills.

Removable side grip handle.

Instantly changeable speed, 1 1/2 to 1 and 4 to 1, operated by shifting knurled ring B.

Cut gears, with adjustable friction roll to equalize bearings.

Ball thrust bearing.

Chuck of Star pattern with three jaws opening with springs, which are protected from injury and will not get out of order, and closing evenly on, and centering accurately, round shanks from 0 to 3/4 inch in diameter.

Length, without handle, 10 inches; with handle, 15 1/4 inches.

No. 98 Hand Drill, each.....\$5.25
Each..D.P. \$5.77

No. 980 Hand Drill



The same as drill No. 98, except for the hollow end handle, which is of shapely design with mushroom head.

Length without handle, 10 inches; with handle, 15 1/4 inches.

No. 980 Hand Drill, each.....\$6.25
Each..D.P. \$5.77

No. 1980 Hand Drill



The same as No. 980, except that it is provided with a simple and effective ratchet.

No. 1980 Hand Drill, each.....\$6.50
Each..D.P. \$7.22

No. 717 Chain Drill

Yoke and nuts japanned; socket and bit shank nickeled.

Automatic self-regulating feed, or may be fed by hand.

Four feet of stout chain.

Length of main spindle, 8 1/2 inches.

Weight, 3 1/2 pounds.

No. 717 Chain Drill, each.....\$3.25
Each..D.P. \$3.55



No. 718 Chain Drill

Same as Chain Drill No. 717 except that master chuck is added for holding round shanks from 1/4 to 1/2 inch in diameter, bit stock, and No. 1 Morse taper shanks.

Length with chuck inserted, 11 1/2 inches.

Weight, 4 1/2 pounds.

No. 718 Chain Drill, each.....\$4.75

Each..D.P. \$5.33



No. 719 Chain Drill

Same as Chain Drill No. 717 excepting that Star chuck is provided for holding round shanks from 0 to 1/2 inch in diameter.

Jaws are operated by springs that are protected from injury and will not get out of order.

Length with chuck inserted, 11 1/4 inches.

Weight, 4 1/2 pounds.

No. 719 Chain Drill, each.....\$6.25
Each..D.P. \$6.88





MILLER'S FALLS TOOLS

Breast Drills



No. 100

Malleable iron black frame; chuck and crank nicked. Breast plate adjustable to different positions and made to fit the hand; when grasped with middle finger through hole provided for it the tool can be held easily and steadied in awkward and out-of-the-way places when the breast plate must be held in the hand. Auxiliary Breast Plate, as shown in illustration. To add ease and comfort or for use in doing heavy work. Instantly changeable speed from even to 3 to 1. Cut gears; small gears of steel. Ball thrust bearing. Chuck is of the Star pattern with three jaws holding round shanks from 0 to $\frac{1}{2}$ inch in diameter. Jaws are operated with springs that are protected from injury and will not get out of order. Weight, each, 7 pounds. Length, 18 inches.

No. 100 Breast Drill, each\$6.00
Each...D.P. \$6.66



No. 99

No. 99 the same as No. 100, except that chuck is of the master pattern, holding and centering with reasonable accuracy, round shanks from $\frac{1}{8}$ to $\frac{1}{2}$ inch in diameter, No. 1 Morse taper and all sizes of bit stock shanks.

No. 99 Breast Drill, each\$5.50
Each...D.P. \$6.10



No. 2200 Ratchet

Malleable iron black frame; no nicked parts. Instantly changeable speed from $1\frac{1}{2}$ to 1 and $\frac{1}{2}$ to 1. Cut gears; small gears of steel. Auxiliary side handle. Chuck of star pattern with three jaws operated by springs that are protected from injury and will not get out of order. Holds round shanks from 0 to $\frac{1}{2}$ inch in diameter. Provided with a simple and effective ratchet. Weight, each, 6 pounds. Length, 17 $\frac{1}{2}$ inches.

No. 2200 Ratchet Breast Drill, each\$7.00
Each...D.P. \$7.77



No. 19

No. 19. Black enameled cast iron frame and breast plate; rolled steel main stock; adjustable crank with radius of 4 to 7 inches; cut gears; ball thrust bearing; changeable speed from even to 3 to 1; speed changed instantly and without removing bit from the work. Harder improved chuck with alligator jaws holding bit stock and many sizes of round shanks. Length, 18 inches. Weight, each, 6 pounds.

No. 19 Breast Drill, each\$3.50
Each...D.P. \$3.88

Breast Drills



No. 212

Malleable iron frame; chuck polished. Breast plate adjustable to different positions and removable; cut gears; small gears of steel; ratio $3\frac{1}{2}$ to 1; diameter of large gear, 4 inches; radius of crank, 4 inches. Hardened steel washer as thrust bearing. Star chuck with large jaws, holding and centering accurately round shanks from 0 to $\frac{1}{2}$ inch in diameter. The jaws in this chuck are operated by springs that are protected from injury and will not get out of order. Length, 14 $\frac{1}{2}$ inches; weight, each, 4 pounds.

No. 212 Breast Drill, each\$3.50
Each...D.P. \$3.88

Bench Drill Press

No. 210



Strong cast iron standard. Hand feed. Instantly changeable speed, $1\frac{1}{2}$ to 1 and 4 to 1. Adjustable crank, extensible from 3 to 6 inches in radius. Table with swivel arm; may be raised within range of 2 inches. Wrench to fit all nuts on the tool. Chuck of star pattern, holding round shanks from 0 to $\frac{1}{2}$ inch, and jaws operated by springs that are protected from injury and will not get out of order. Height over all, 24 in. Maximum distance from chuck to table, 9 in. Weight, boxed, 27 $\frac{1}{2}$ lbs.; net, 22 lbs. Packed one in a wooden box.

No. 210 Bench Drill Press, each\$12.50
Each...D.P. \$13.88

Glass Cutters



Light iron handle; cutter head polished; steel cutter wheel, carefully tempered and ground.
Each cutter packed in an individual carton.

No. 7 Glass Cutters, each\$0.10
Each...D.P. \$0.11



Nickled frame; fancy wood handle. Six highly tempered and perfect cutting steel wheels set in a revolving turret, clamped in place by set screw.

No. 300 Glass Cutters, each\$0.50
Each...D.P. \$0.50



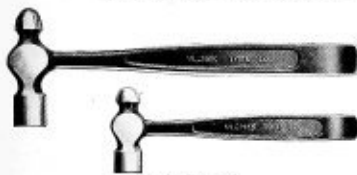
HAMMERS

Machinist's Ball Pein Hammers



4-oz. B.P. Hammer..	Each \$0.50	12-oz. B.P. Hammer	Each \$0.50
Dozen.. D.P.	\$7.55	Dozen.. D.P.	\$7.55
6-oz. B.P. Hammer..	.50	16-oz. B.P. Hammer	.55
Dozen.. D.P.	\$7.55	Dozen.. D.P.	\$8.00
8-oz. B.P. Hammer..	.50	24-oz. B.P. Hammer	.60
Dozen.. D.P.	\$7.55	Dozen.. D.P.	\$9.11

All Steel Ball Pein Hammer



Vibek Brand

Drop forged in one piece. Can be used instead of regular ball pein hammer to better advantage. Suggested particularly for motorcycle and automobile repair work, on account of having tire iron handle.

A practical tool for all mechanics.

4-ounce All Steel Ball Pein Hammer, each.....	\$0.50
Dozen.. D.P.	\$8.00
10-ounce All Steel Ball Pein Hammer, each.....	.60
Dozen.. D.P.	\$10.00

Perfect Handle Hammer



Made of drop forgings, one piece of steel; is 10 inches long, with $\frac{3}{4}$ -inch head, and weighs 19 ounces.

Price, each.....	\$0.85
Dozen.. D.P.	\$17.76

Riveting Hammer



TINNERS RIVETING HAMMER.

No. 1 Tinner's Riveting Hammer, $\frac{1}{2}$ pound	\$0.50
Dozen.. D.P.	\$8.88

No. 2 Tinner's Riveting Hammer, $\frac{3}{4}$ pound, each....	.55
Dozen.. D.P.	\$9.44

No. 3 Tinner's Riveting Hammer, 1 pound, each....	.60
Dozen.. D.P.	\$10.22

Engineer's Hammer



PLOW OR ENGINEER'S HAMMER

No. 0 Engineer's Single Face Hammer, 1 pound 2 ounces, each.....	\$1.00
Dozen.. D.P.	\$12.21

No. 1 Engineer's Single Face Hammer, 1 pound 10 ounce, each.....	1.10
Dozen.. D.P.	\$13.32

No. 2 Engineer's Single Face Hammer, 2 pound, each.....	1.15
Dozen.. D.P.	\$14.66

No. 3 Engineer's Single Face Hammer, 2 pound 8 ounce, each.....	1.25
Dozen.. D.P.	\$15.90

Turner Motor Washer

This device is indispensable to the auto owner or the garage repair man. By using it all grease, grime and dirt can be instantly removed from all otherwise inaccessible parts of the motor and other mechanism. No grease or oil cup should ever be removed and opened for filling without first being cleaned with this washer. Its use before making repairs or changes in the motor will insure clean hands and clothing.



The high air pressure forcing the gasoline will quickly remove every particle of dirt and grease, and uses a minimum amount of gasoline, one quart being sufficient for cleaning the dirtiest motor. Once used, you would never go back to the old way of wiping with a cloth or piece of waste. Not only can it be used for cleaning motors, but in the factory for washing the gummed oil and dirt from all parts of the machinery which can not be reached in any other way.

Each.....	\$4.00
Each.. D.P.	\$6.66

Romort Engine Cleaner

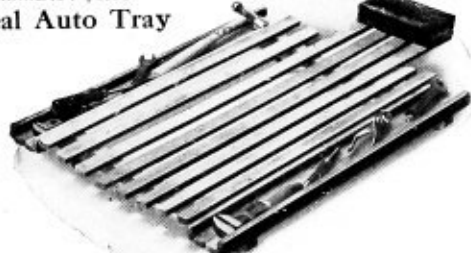


The Romort Engine Cleaner is a

guaranteed device that has no equal for the cleaning of dirt and grease from the machinery of automobiles and motorcycles. Constructed on scientific lines—the air does not enter the tank, but passes right through the air tube, picking up the fluid at the extreme end of the cleaner, thereby eliminating all danger of explosion, this being absolutely impossible. With the long spout the operator reaches every nook and corner of the machinery. Fluid capacity two quarts (common coal oil is the best). This quantity is sufficient to clean the largest engine. Air may be supplied from any system that produces from 20 to 200 pounds pressure. We highly recommend power tire pumps attached to autos, garage storage air systems, etc. When attached to air supply, fluid is forced out in a heavy spray, requiring not over five minutes to thoroughly clean the machinery. Size of cleaner 20 $\frac{1}{2}$ inches long by 4 inches diameter. Weight 2 pounds.

Each.....	\$3.00
Each.. D.P.	\$5.00

Ideal Auto Tray



Thirty-seven inches long, 22 inches in width, 3 inches from floor, on four roller bearing casters, made of hardwood, with tool rack. This is a great advantage, as the tools are where you can find them. Finish in the white.

Each.....	\$3.00
Each.. D.P.	\$3.33



THE GIBSON COMPANY

INDIANAPOLIS



FILES



Size	6	8	10	12
Flat Bastard Files, dozen	\$4.30	\$5.30	\$7.00	\$9.70
Dozen.....D.P.	\$2.45	D.P. \$3.00	D.P. \$4.00	D.P. \$5.55



Size	6	8	10	12	14
Mill Bastard Files, dozen	\$3.50	\$4.30	\$5.60	\$7.50	\$10.70
Dozen.....D.P.	\$2.00	D.P. \$2.45	D.P. \$3.22	D.P. \$4.22	D.P. \$6.11



Size	6	8	10	12	14
Half Round Bastard Files, dozen	\$6.10	\$7.50	\$9.10	\$11.80	\$15.50
Dozen.....D.P.	\$3.56	D.P. \$4.22	D.P. \$5.33	D.P. \$6.66	D.P. \$8.88



Size	4	6	8	10	12
Round Bastard Files, dozen	\$3.00	\$3.50	\$4.30	\$5.60	\$7.50
Dozen.....D.P.	\$1.73	D.P. \$2.00	D.P. \$2.45	D.P. \$3.22	D.P. \$4.22



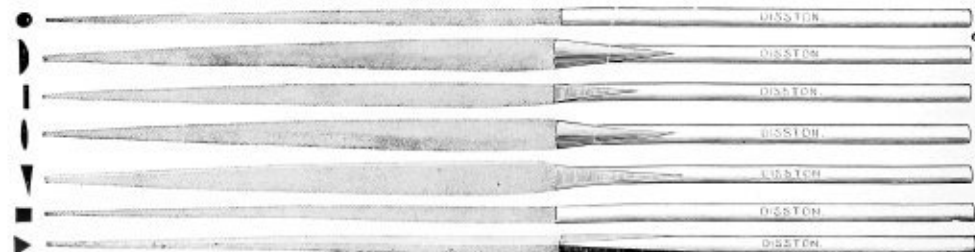
Size	3½	4	4½	5	5½	6
Slim Taper Files, dozen	\$2.10	\$2.20	\$2.30	\$2.50	\$2.90	\$3.10
Dozen.....D.P.	\$1.22	D.P. \$1.27	D.P. \$1.34	D.P. \$1.45	D.P. \$1.67	D.P. \$1.78



Size	4	5	6
Warding Files, dozen	\$4.00	\$4.50	\$4.90
Dozen.....D.P.	\$2.33	D.P. \$2.56	D.P. \$2.78



Magneto Files, 3½-inch, for platinum points on coils and magnetos, dozen	\$2.35
Dozen.....D.P.	\$3.00



Set of twelve needle files of the following varieties:

Round, half round, flat, oval, knife, square, 3-square, equaling, slitting joint, barrette, marking with round handle.

Price per set	\$2.00
Per set.....D.P.	\$2.67



VICES

Rock Island Diamond Stationary Vise



This is our standard stationary base vise. It has all the qualities of design, strength and material of the Diamond swivel base vise.

These vises are heavy and the material is well distributed. All vital points are reinforced.

Material: Casting, our special alloy; screw, cold rolled steel; handle, cold rolled steel; jaws, crucible cast tool steel, carefully hardened; nut, malleable iron.

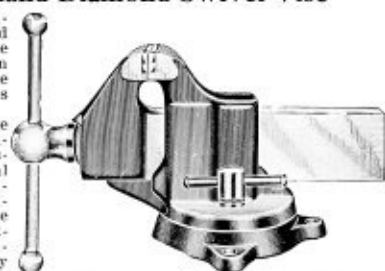
No.	Width Jaw, Inches	Opens, Inches	Weight, Pounds	Each
90	2½	2½	17	\$5.00
Each...D.P.				\$6.06
91	3	4	22	6.00
Each...D.P.				\$8.00
92	3½	5	28	7.00
Each...D.P.				\$9.33
93	4	6	42	8.50
Each...D.P.				\$11.33
94	4½	6½	54	10.00
Each...D.P.				\$13.32
95	5	7½	75	13.00
Each...D.P.				\$15.99

Rock Island Diamond Swivel Vise

This is our standard swivel vise, and we believe we have the best design on the market. Notice the lines of this vise.

These vises are heavy and the material is well distributed. All vital points are reinforced. Our Diamond vises are practically unbreakable. We guarantee to replace any that do break.

This vise can be turned in any position on an axis parallel with the floor and is locked by a clamping bolt, which works in a channel.



No.	Width Jaw, Inches	Opens, Inches	Weight, Pounds	Each
70	2½	2½	20	\$5.50
Each...D.P.				\$7.33
71	3	4	28	7.50
Each...D.P.				\$10.00
72	3½	5	38	8.75
Each...D.P.				\$11.66
73	4	6	54	10.50
Each...D.P.				\$13.99
74	4½	6½	65	12.00
Each...D.P.				\$15.99
75	5	7½	90	16.00
Each...D.P.				\$21.32

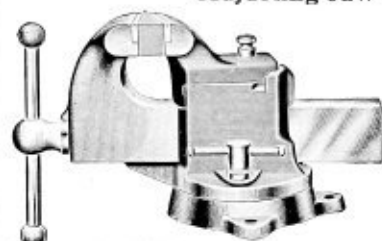
Rock Island Auto Vise



A combination pipe vise and anvil. This vise is especially adapted for automobile repair work. There is nothing on the market so suitable for all kinds of repair work. This vise is very heavy, is made of same material as our other well-known types.

No.	Width Jaw, Inches	Capacity Pipe, Inches	Weight, Pounds	Each
241	3½	1 to 2	80	\$16.00
Each...D.P.				\$22.20

Rock Island Diamond Swivel Vise With Self-Adjusting Jaw



Our standard swivel vise with self-adjusting jaw. This vise can be turned in any position on an axis parallel with the floor, and is locked by a clamping bolt which works in a channel.

The back jaw of this vise is self-adjusting, and when in use conforms automatically to any angle and makes firm the object held.

The self-adjusting jaw feature is of such a design that it is absolutely as strong and durable as a solid jaw. Other manufacturers do not use this design because it costs more to build.

No.	Width Jaw, Inches	Opens, Inches	Weight, Pounds	Each
50	3½	5	37	\$8.75
Each...D.P.				\$15.54
51	4	6½	53	10.50
Each...D.P.				\$18.65
52	4½	7	70	12.50
Each...D.P.				\$22.20
53	5	7½	95	16.00
Each...D.P.				\$28.42
54	5½	8½	125	22.00
Each...D.P.				\$39.08
55	6	11	158	27.00
Each...D.P.				\$47.96
56	7	12	220	35.00
Each...D.P.				\$62.16

Rock Island Combination Forge, Anvil, Vise, Drill, Etc.

The machine is 52 inches high and 48 inches long.

Weights about 150 pounds.

This tool is indispensable to the farmer, contractor and others who have implements, automobiles or machinery of any kind to repair. There is no other combination tool manufactured so suitable for repairing of all kinds.

The construction of the tool is very simple, there being no complicated mechanism to break or get out of order.

Forge—Pan is oval shape, 12x15 inches and stands 27 inches from floor.

Pan—Is 7 inches in diameter, is driven by an accurately cut gear and pinion. Will produce sufficient blast with very little exertion.

Anvil—Is 3½ inches wide by 12 inches long. Is solid semi-steel. A hardy is furnished.

Vise—Jaws are 3½ inches wide and open 11 inches. We use crucible tool steel in the jaws. Pipe jaws will take pipe up to 2 inches diameter.

Drill Chuck—Takes ½-inch round shank drill. Distance from chuck to feed table 8 inches. Chucks are cold rolled steel.

Each	
Each...D.P.	\$33.30
	\$25.00





DIFFERENTIAL BLOCKS AND GRINDERS

Yale Block

Made by Yale & Towne

These blocks handle heavy loads readily and are sold at the lowest prices possible for reliable blocks.

Yale & Towne Chain Hoisting Block,
 $\frac{1}{4}$ ton capacity, 6-foot hoist, each \$18.00
 Each D.P. \$19.98

Yale & Towne Chain Hoisting Block,
 $\frac{1}{2}$ ton capacity, 7-foot hoist, each 21.00
 Each D.P. \$23.31

Yale & Towne Chain Hoisting Block,
 1 ton capacity, 8-foot hoist, each 28.00
 Each D.P. \$31.08

Yale & Towne Chain Hoisting Block,
 $1\frac{1}{2}$ ton capacity, 8 $\frac{1}{2}$ -foot hoist, each 36.00
 Each D.P. \$39.96

Every block tested to a 50 per cent. overload.

Yale Block

Yale & Towne Triplex Block, $\frac{1}{2}$ ton
 capacity, 8-foot hoist, each \$35.00
 Each D.P. \$62.16

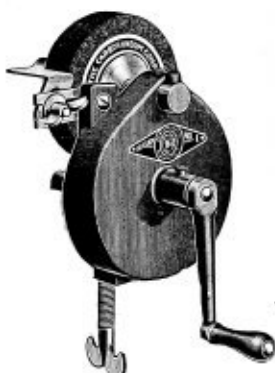
Yale & Towne Triplex Block, 1 ton
 capacity, 8-foot hoist, each 45.00
 Each D.P. \$79.92

Yale & Towne Triplex Block, $1\frac{1}{2}$
 ton capacity, 8-foot hoist, each 60.00
 Each D.P. \$106.56

Yale & Towne Triplex Block, 2 ton
 capacity, 9-foot hoist, each 70.00
 Each D.P. \$124.32

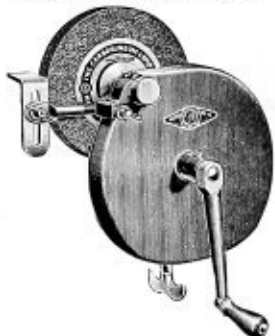
Every block tested to a 50 per cent. overload.

Niagara Grinder No. 3



Carborundum Niagara Grinder No. 3 is fitted with an adjustable tool-grinding guide, and a medium grit Carborundum wheel, 6 inches in diameter, 1 inch thick. Weight, packed, 10 pounds.
No. 3 Niagara Grinder, complete, each \$5.00
 Each D.P. \$8.32

Niagara Grinder No. 4



Carborundum Niagara Grinder No. 4 is fitted with an adjustable tool-grinding guide and a Carborundum wheel $7\frac{1}{2}$ inches in diameter, $1\frac{1}{4}$ inches thick. Weight, packed, 26 pounds.
No. 4 Niagara Grinder, complete, each \$8.00
 Each D.P. \$13.32

Niagara Grinder Foot Power Attachment No. 21

This foot power attachment can be fitted to either No. 3 or No. 4 Niagara Grinder. The attachment is simple and powerful. It is made of malleable iron and is strong and durable. It is readily adjusted to several heights. The illustration shows attachment fitted to No. 4 Grinder.

No. 21 Niagara Foot Power Attachment, each \$1.50
 Each D.P. \$2.49





TORCHES, FIRE POTS AND BRAZERS

No. 31 Torch (Quart Size)

Has No Equal Where Intense Heat Is Desired



This quart torch makes a perfect fire, whether employed indoors or out, in hard wind or extreme cold. A strong blast heat is generated by a powerful burner and the resulting blue flame is a joy to the user. Every desired adjustment is quickly made. A surprisingly small amount of gasoline is required compared with the results obtained in heat efficiency. The torch creates a good impression the minute it is handled, being strong, exceedingly well built and handsomely finished. If durability and service are what you want, the No. 31 will certainly please you.

Each.....\$5.25
Each.....D.P. \$7.77

No. 32 Torch (Quart Size)

No. 32 has every feature in construction and finish found in No. 31, with the added advantage, for repairmen, of a book and support on the burner for holding soldering coppers.

Each.....\$5.50
Each.....D.P. \$8.15

No. 47 Torch (Pint Size)

1 1/2 in. thick by 5 in. long. Stands, with burner, 8 in. high



Having a practical knowledge of the requirements of automobile users, we have designed the No. 47 Torch especially for them. They will find it a carefully constructed torch amply suited to their needs. It is oblong, being 1 1/2 in. thick, 5 in. long and stands 8 in. high, complete with burner. It is fitted with a special burner, which is light, yet sufficiently powerful to generate a flame adapted to all requirements.

Each.....\$5.40
Each.....D.P. \$8.00

No. 48 Torch (Pint Size)

No. 48 is like No. 47, except that the burner has a book and support for soldering coppers, convenient for repairmen.

Each.....\$5.65
Each.....D.P. \$8.37

No. 116 Torch (Quart Size)



No. 118 Torch (Pint Size)



Having had some demand for a quart size torch, with special pump, we offer the No. 116 to the trade and when a torch is required at a low price, we know it will please the user. The special pump is made the same as other competitive pumps, but we allow the user to decide as to the comparison with our patented automatic brass pump with double springs—two springs usually are better than one. The tank is made of seamless drawn brass, and the burner of good bronze metal. We supply, free of charge, detachable book and support. Include the No. 116 in your order.

Each.....\$3.30
Each.....D.P. \$4.89

The No. 118 is similar to No. 116, except pint size. The same style of pump is used and it is supplied with detachable book and support.

Each.....\$3.10
Each.....D.P. \$4.60

No. 1 Fire Pot (Seven Pints)

The Greatest General Utility Fire Pot Made



For tinner, galvanized iron and copper workers, plumbers and electricians. The No. 1 Fire Pot is 12 1/2 inches high, 9 3/4 inches diameter at base, and 6 3/4 inches at top. The tank is made of heavy galvanized iron, thoroughly braced to withstand hard usage, and lasts much longer than if made of brass or any other material. The burner (at the expense of only half the gasoline required in other makes) represents the highest development in generating power and heat efficiency, quickly producing an ideal blue flame entirely free from smoke, easily regulated, giving satisfactory results under all reasonable conditions, including windy or cold weather.

The burner is swiveled, which permits moving the flame up or down, and fitted with cleanout plugs, thus being easily kept clean. With the No. 1 the heaviest irons are thoroughly heated in half the time required by other makes, the flame being so directed that the heel of the copper is in the hottest part of the flame. A pair of 12-lb. soldering coppers can be heated, and a kettle of lead or solder melted at the same time. The top section can be removed, thus producing an open fire.

No. 1 Galvanized Iron Tank, each.....\$9.00
Each.....D.P. \$13.32

No. 5 Fire Pot (Five Pints)

The No. 5 is an exact duplicate of the No. 1, only smaller, being about two-thirds its size. Height over all, 12 inches; diameter at base, 8 1/2 inches and at top, 6 inches. Tank is made of heavy galvanized iron and holds 5 pints. Top section is large enough to easily handle a pair of 8-lb. coppers and a 5-inch metal pot at the same time. The burner produces a pure blue flame, intensely hot, using but little gasoline (less than half required by some makes). While the No. 5 is not as large and powerful as the No. 1, still it will do any work any other make of fire pot will do, and much that cannot be done with them. By removing the top section, the base may be used as a torch or brazing fire, enabling the user to accomplish any work any torch will do.

No. 5 Galvanized Iron Tank, each.....\$6.75
Each.....D.P. \$10.00



No. 105 Brazier (For Gasoline)



The No. 105 Brazier is designed for heavy brazing, pre-heating surfaces, tempering, and for use in the garage and in general repair shops and factories. The burner is fitted with a powerful generator that superheats the gas, producing a perfect blue flame of intense heat, and is swiveled, enabling the operator to point the flame in any direction desired as indicated, and hold it there. The tank is 10-gallon capacity, made with welded seams and galvanized inside and out.

The No. 105 Brazier is operated under a working pressure of 75 pounds, produced by a powerful, compound, detachable brass pump, and can be operated, if desired, by compressed air. The adjustable brazing tripod, as illustrated, is furnished with the complete Brazier.

Shipping weight, 130 pounds. Capacity, 10 gallons.

No. 105—Complete with tripod, as illustrated, each.....\$37.50
Each.....D.P. \$55.50

Brazier—Complete without brazing tripod, each.....33.00
Each.....D.P. \$48.84

Tank—Complete with pump, gauge and filler plug, each.....20.10
Each.....D.P. \$29.75

Brazing Tripod—Complete, each.....7.50
Each.....D.P. \$11.10

Burners only, each.....12.00
Each.....D.P. \$17.76



AUTOMOBILE SCREW PLATES



In Hardwood Case, Green River Style

—Assortments—

No. 1460. $\frac{1}{4}$ to $\frac{1}{2}$ in. 5 sizes. Stock 18 inches long. Adjustable tap wrench No. 57. Plug taps, dies and guides A. L. A. M. standard, cutting $\frac{1}{8}$ -28, $\frac{1}{8}$ -24, $\frac{1}{8}$ -20, $\frac{1}{2}$ -20; each.....\$10.75
Each.....D.P. \$16.65

No. 1464. $\frac{1}{4}$ to $\frac{1}{2}$ in. 7 sizes. Stock 22 inches long. Adjustable tap wrench No. 53. Plug taps, dies and guides A. L. A. M. standard, cutting $\frac{1}{8}$ -28, $\frac{1}{8}$ -24, $\frac{1}{8}$ -20, $\frac{1}{2}$ -20, $\frac{1}{2}$ -18, $\frac{1}{2}$ -16; each.....\$14.00
Each.....D.P. \$21.65

No. 1462. $\frac{1}{4}$ to 1 in. 11 sizes. Stock 22 inches long. Adjustable tap wrench No. 58. Plug taps, dies and guides A. L. A. M. standard, cutting $\frac{1}{8}$ -28, $\frac{1}{8}$ -24, $\frac{1}{8}$ -20, $\frac{1}{2}$ -20, $\frac{1}{2}$ -18, $\frac{1}{2}$ -16, $\frac{3}{4}$ -16, $\frac{1}{2}$ -14, 1 in.-14; each.....\$27.00
Each.....D.P. \$41.63

All taps and dies furnished with A. L. A. M. standard pitches unless otherwise specified. U. S. standard pitches, and "V" and Whitworth forms and pitches furnished at same price when so ordered.



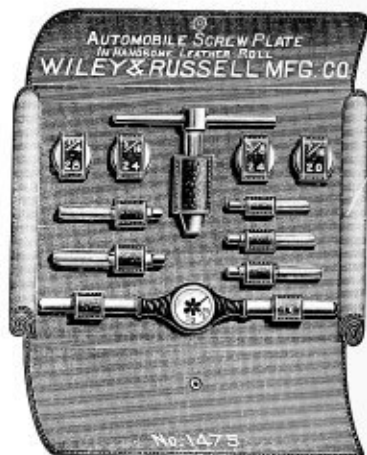
In Handsome and Substantial Hardwood Case

—Assortments—

Set No. 1480. Stock and seven sizes round adjustable dies and plug taps, $\frac{1}{8}$ -28, $\frac{1}{8}$ -24, $\frac{1}{8}$ -20, $\frac{1}{2}$ -20, $\frac{1}{2}$ -18, $\frac{1}{2}$ -16, A. L. A. M. standard, complete, and in handsome hardware case.....\$13.50
Each.....D.P. \$19.43

These sets contain same sizes and same styles of stocks, dies and taps as in Set 1470, except are furnished in hardwood cases instead of leather rolls.

We also supply No. 1480 in U. S. standard thread at same price. In ordering, please state thread desired.

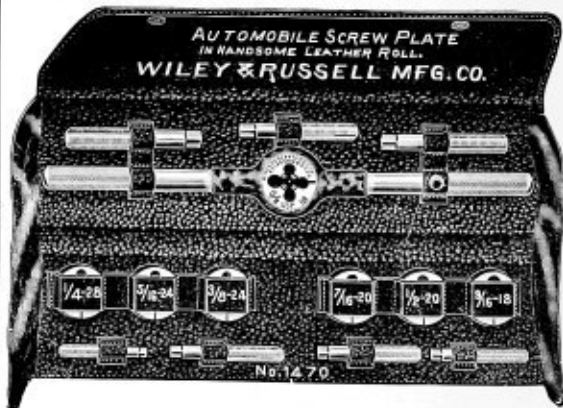


In Leather Roll. Set With Adjustable T Tap Wrench

No. 1475. $\frac{1}{4}$ to $\frac{1}{2}$ in. 5 sizes. Stock 9 inches long. Adjustable T tap wrench No. 333. Taps and dies cutting $\frac{1}{8}$ -28, $\frac{1}{8}$ -24, $\frac{1}{8}$ -20, $\frac{1}{2}$ -20, A. L. A. M. standard; each.....\$10.00
Each.....D.P. \$14.43

This set has dies 1-inch outside diameter, T style tap wrench. Dies and taps are A. L. A. M. standard.

We also supply No. 1475 in U. S. standard thread at same price. In ordering, please state thread desired.



In Handsome Leather Roll

—Assortments—

No. 1470. $\frac{1}{4}$ to $\frac{1}{2}$ in. 7 sizes. Stock 13 inches long. Round adjustable dies and plug taps cutting $\frac{1}{8}$ -28, $\frac{1}{8}$ -24, $\frac{1}{8}$ -20, $\frac{1}{2}$ -20, $\frac{1}{2}$ -18, $\frac{1}{2}$ -16, A. L. A. M. standard; each.....\$13.50
Each.....D.P. \$19.43

No. 1472. $\frac{1}{4}$ to $\frac{1}{2}$ in. 7 sizes dies and taps. 3 sizes iron pipe dies. Stock 13 inches long. Round adjustable dies and plug taps cutting $\frac{1}{8}$ -28, $\frac{1}{8}$ -24, $\frac{1}{8}$ -20, $\frac{1}{2}$ -20, $\frac{1}{2}$ -18, $\frac{1}{2}$ -16, A. L. A. M. standard. Dies for iron pipe cutting $\frac{1}{2}$, $\frac{3}{4}$ and 1; each.....\$18.50
Each.....D.P. \$26.64

We also supply Nos. 1470 and 1472 in U. S. standard thread at same price. In ordering, please state thread desired.



AUTOMOBILE SCREW PLATES AND TAPS

Nos. 310 and 311 Combination Sets



These combination assortments avoid the expense of buying a separate outfit for each thread standard and the consequent duplication of stocks and tap wrenches. A bit brace die holder is also provided in these assortments for convenience where it is desired to merely run over a slightly battered thread without removing the bolt or screw from its place in the car.

U. S. S. and S. A. E.



No. 310 (5 cutting sizes) \$18.00

Each, D.P. \$27.75

1/4, 5/16, 3/8, 7/16, 1/2, U. S.

S. 1/4, 5/16, 3/8, 7/16, 1/2, S. A. E.

Stock 1 1/4 in. long. Adjustable Tap Wrench No. 5.

Dies in 2 in. diameter collets. U. S. S. Taper Taps.

S. A. E. Standard Plug Taps.

No. 311 (8 cutting sizes) \$27.00

Each, D.P. \$41.63

1/4, 5/16, 3/8, 7/16, 1/2, 9/16,

3/4, 1 in. both U. S. S. and S. A. E.

Two Stocks, 1 1/4 and 2 1/4 in. long. Two Adjustable

Tap Wrenches, Nos. 5 and 6.

Dies up to and including 1/2 in. in 2 in. diameter collets.

Sizes larger than 1/2 in. in

2 3/4 in. diameter collets. U. S. S.

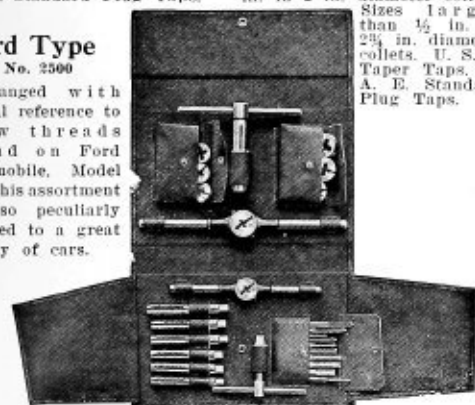
Taper Taps, S. A. E. Standard

Plug Taps.

Ford Type

No. 2300

Arranged with special reference to screw threads found on Ford Automobile, Model T. This assortment is also peculiarly adapted to a great variety of cars.



Contents

To fit 6 3/8-inch stock and 4-inch "T" tap wrench:

Sizes	Threads Per Inch	
No. 6	32	} One tap (plug), one die (13/16 in. diameter), one guide, for each cutting size.
No. 10	24 and 32	
No. 12	24	
No. 14	24	
7/32-inch	32	
1/4-inch	20	} One tap (plug), one die (1 inch diameter), one guide, for each cutting size.
5/16-inch	18 and 24	
3/8-inch	16 and 24	
13/32-inch	16	
7/16-inch	14 and 20	
1/2-inch	20	} Pipe
3/4-inch	18	

Price, leather case. \$18.50

Each, D.P. \$26.64

Patent Machine Relieved Lightning Taps



No. 302—Taper



No. 303—Plug

Taper and Plug Taps, A. L. A. M. Thread

Size Inches	No. of Threads to Inch	Price Each D.P.	Size Inches	No. of Threads to Inch	Price Each D.P.
1/4	28	\$0.40	11/16	18	\$0.80
5/16	24	.45	1/2	16	.94
3/8	24	.49	1/2	16	1.07
7/16	20	.54	1/2	14-18	1.42
1/2	20	.62	1	14	1.78
9/16	18	.71			

Taper and Plug Taps, U. S. Standard Thread

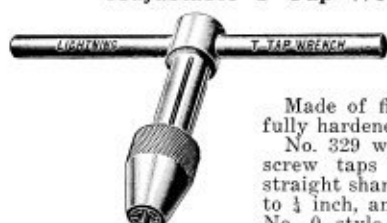
Size Inches	No. of Threads to Inch	Price Each D.P.	Size Inches	No. of Threads to Inch	Price Each D.P.
1/4	20	\$0.40	11/16	11	\$0.80
5/16	18	.45	1/2	11	.94
3/8	16	.49	1/2	10	1.07
7/16	14	.54	1/2	9	1.42
1/2	13	.62	1	8	1.78
9/16	12	.71			



Spark Plug Taps

1/4-inch Standard, each.....	D.P. \$0.89
1/2-inch A.L.A.M., each.....	D.P. 1.56
Metric, each.....	D.P. 1.00

Adjustable T Tap Wrench



Two Sizes

Made of finest steel, carefully hardened and tempered.

No. 329 will take machine screw taps Nos. 2 to 14, straight shank taps 5/64 inch to 1/4 inch, and taps with our No. 0 style of shank (.229 inch diameter).

Price per dozen.....\$6.00

Dozen.....D.P. \$10.00

The following sizes of taps can be supplied with No. 0 style of shanks, viz: Screw gauge sizes Nos. 1 to 18, wire gauge size Nos. 16 to 17, and fractional sizes 1/16 to 9/32 inch.

No. 333 will take Machine Screw Taps Nos. 14 to 24, and Hand Taps 9/32 to 1/2 inch, price per dozen.....\$12.00

Dozen.....D.P. \$19.98



AUTOMOBILE REAMERS

Green River Taper-Pin Reamers



Set for Automobile Kits in Handsome Leather Case

These Reamers are very useful for quick repair work and breakdowns on the road. Jammed and worn pin holes can be reamed smooth or to take next size larger pin.

In handsome and substantial leather case, size closed 5 inches by 2 inches; weight 4 ounces.

Set No. 1423 Six sizes Spiral Fluted Taper-Pin Reamers, Nos. 0, 1, 2, 3, 4 and 5, price complete, in genuine leather case.....\$8.50

No. 1429 Taper-Pin Reamer Set, same as No. 1423, only put up in wooden case, each.....\$8.50
Each.....D.P. \$11.32



No. 404
Taper 1/4 Inch to Foot

Size No.	Diam. at Small End Inches	Length of Flute Inches	Total Length Inches	Price Each
0	0.133	1 1/8	2 1/2	D.P. \$1.34
1	0.146	1 1/4	2 3/4	D.P. 1.34
2	0.162	1 1/2	3 1/4	D.P. 1.67
3	0.183	2 1/8	3 3/4	D.P. 2.00
4	0.208	2 1/4	3 3/4	D.P. 2.33
5	0.240	2 1/2	4 1/2	D.P. 2.67
6	0.279	3 1/8	5 1/2	D.P. 3.00
7	0.331	4 1/4	6 1/4	D.P. 3.33
8	0.398	5 1/4	7 1/4	D.P. 4.00
9	0.482	6 3/8	8 1/4	D.P. 4.67
10	0.581	7 1/2	9 1/2	D.P. 5.33
11	0.706	8 1/4	11 1/4	D.P. 6.33
12	0.842	10	13 3/8	D.P. 7.33
13	1.009	12	16	D.P. 8.66
14	1.250	14	18 1/4	D.P. 10.33

Diameter is taken at extreme end.
Each Reamer made to overlap about 1/2 inch the size smaller. Special or larger sizes made to order.

Noonan Valve Seating Tool

Noonan's Valve Seating Tools are made from the finest grade of high speed steel and are guaranteed for one year from defects in material and workmanship.

Noonan Valve Seating Tools, Ford size (for Ford only), complete with handle, guide and cutter, each.....D.P. \$2.78

Noonan Valve Seating Tools for all other cars, guide and handle (without cutter), each.....D.P. 1.67

Cutters as follows:

Inches	Each D.P.
1 1/2	Each D.P. \$2.78
1 3/4	Each D.P. 2.89
1 7/8	Each D.P. 3.00
2	Each D.P. 3.10
2 1/8	Each D.P. 3.22
2 1/4	Each D.P. 3.33
2 1/2	Each D.P. 3.44
2 3/4	Each D.P. 3.55
2 7/8	Each D.P. 3.66
3	Each D.P. 3.77
3 1/8	Each D.P. 3.88
3 1/4	Each D.P. 4.00
3 1/2	Each D.P. 4.10
3 3/4	Each D.P. 4.22
3 7/8	Each D.P. 4.33
4	Each D.P. 4.44
4 1/8	Each D.P. 4.55



Hand Reamers

No. 128-A Carbon Steel Hand Reamer



(Eccentric Flutes)

Diam. Inches	Length of Flute Inches	Length Over All Inches	Each D.P.	Diam. Inches	Length of Flute Inches	Length Over All Inches	Each D.P.
3/8	1 1/2	3	\$1.49	1 1/2	5 1/4	10 1/4	5.04
1/2	1 3/4	3 1/4	1.65	3 1/2	5 1/2	10 1/4	5.26
5/8	1 3/4	3 1/2	1.78	1	5 3/8	10 3/4	5.49
3/4	1 7/8	3 3/4	1.93	1 1/2	5 3/4	11 1/4	5.71
7/8	2	4	2.09	1 3/4	5 3/4	11 1/4	5.93
1	2 1/8	4 1/4	2.16	1 3/4	5 3/4	11 1/4	6.15
1 1/8	2 1/4	4 1/2	2.22	1 3/4	5 3/4	11 1/4	6.37
1 1/4	2 1/4	4 3/4	2.31	1 3/4	5 3/4	11 1/4	6.60
1 1/2	2 1/2	5	2.38	1 3/4	6	12	6.82
1 3/4	2 1/2	5 1/4	2.49	1 3/4	6 1/4	12 1/4	7.04
1 7/8	2 1/2	5 1/2	2.60	1 3/4	6 1/4	12 1/4	7.26
2	2 1/2	5 3/4	2.76	1 3/4	6 1/4	12 1/4	7.48
2 1/8	3	6	2.82	1 3/4	6 1/2	12 1/4	7.71
2 1/4	3 1/8	6 1/4	2.87	1 3/4	6 1/2	12 1/4	7.93
2 1/2	3 1/4	6 1/2	2.98	1 3/4	6 1/2	12 1/4	8.15
2 3/4	3 1/4	6 3/4	3.11	1 3/4	6 1/2	12 1/4	8.37
2 7/8	3 1/2	7	3.27	1 3/4	6 1/2	12 1/4	8.59
3	3 1/2	7 1/4	3.42	1 3/4	6 1/2	12 1/4	8.81
3 1/8	3 1/2	7 1/4	3.53	1 3/4	6 1/2	12 1/4	9.03
3 1/4	4 1/8	8 1/4	3.71	1 3/4	6 1/2	12 1/4	9.25
3 1/2	4 1/8	8 3/4	3.84	1 3/4	6 1/2	12 1/4	9.47
3 3/4	4 1/2	8 3/4	4.00	1 3/4	6 1/2	12 1/4	9.69
3 7/8	4 1/2	9 1/4	4.15	1 3/4	6 1/2	12 1/4	9.91
4	4 1/2	9 3/4	4.38	1 3/4	6 1/2	12 1/4	10.13
4 1/8	4 1/2	9 1/2	4.60	1 3/4	6 1/2	12 1/4	10.35
4 1/4	5 1/4	10 1/2	4.82	1 3/4	6 1/2	12 1/4	10.57

Expansion Reamers

No. 129 Common Sense Expansion Reamer



(Eccentric Flutes)

Diam. Inches	Length of Flute Inches	Length Over All Inches	Each D.P.	Diam. Inches	Length of Flute Inches	Length Over All Inches	Each D.P.
3/4	2	3 1/4	\$4.44	1 1/2	4 1/4	8 1/4	\$9.26
1/2	2 1/8	3 3/8	4.53	1 1/2	4 1/4	8 1/4	9.48
5/8	2 1/4	4	4.60	1	4 1/8	8 1/2	10.00
3/4	2 1/4	4 1/4	4.67	1 1/2	5	8 1/4	10.37
7/8	2 1/2	4 1/2	4.75	1 1/2	5 1/8	9	10.75
1	2 1/4	4 3/8	4.82	1 1/2	5 1/8	9 1/4	11.10
1 1/8	2 1/2	4 3/4	4.89	1 1/2	5 1/8	9 1/4	11.48
1 1/4	2 1/2	4 3/4	4.98	1 1/2	5 1/8	9 1/4	11.86
1 1/2	2 1/2	5	5.04	1 1/2	5 1/8	9 1/4	12.30
1 3/4	2 3/8	5 1/8	5.20	1 1/2	5 1/8	9 1/4	12.75
1 7/8	2 3/4	5 3/8	5.42	1 1/2	5 1/8	9 1/4	13.19
2	2 3/4	5 3/8	5.64	1 1/2	5 1/8	10	13.61
2 1/8	3 1/8	5 3/4	5.93	1 1/2	5 1/8	10 1/4	14.06
2 1/4	3 1/4	6	6.22	1 1/2	5 1/8	10 1/4	14.81
2 1/2	3 1/2	6 1/4	6.53	1 1/2	5 1/8	10 3/4	15.54
2 3/4	3 3/4	6 1/2	6.82	1 1/2	5 1/8	10 3/4	16.30
2 7/8	3 3/4	6 3/4	7.11	1 1/2	5 1/8	10 3/4	17.05
3	3 3/4	6 3/4	7.42	1 1/2	6	10 3/4	17.76
3 1/8	4	7 1/8	7.77	1 1/2	6	10 3/4	18.52
3 1/4	4 1/8	7 3/8	8.15	1 1/2	6 1/4	11 1/4	19.25
3 1/2	4 1/8	7 3/8	8.53	1 1/2	6 1/4	11 1/4	19.98
3 3/4	4 1/8	7 1/2	8.88	1 1/2	6 1/4	11 1/4	20.74
3 7/8	4 1/8	7 1/2		1 1/2	6 1/4	11 1/4	21.47



DRILLS

Stubs Steel Wire Gauge Drills



With Straight Shanks
List No. 98

With Grooved Shanks
List No. 90 (1 to 42 only)

Wire Gauge No.	Diameter Inches	Length Over All Inches	Price Per Dozen
1	.2280	4	D.P. \$2.35
2	.2210	3 1/8	D.P. 2.35
3	.2130	3 1/8	D.P. 2.35
4	.2090	3 1/8	D.P. 2.35
5	.2055	3 1/8	D.P. 2.35
6	.2040	3 1/8	D.P. 2.25
7	.2010	3 3/8	D.P. 2.25
8	.1990	3 1/8	D.P. 2.25
9	.1960	3 1/8	D.P. 2.25
10	.1935	3 5/8	D.P. 2.25
11	.1910	3 5/8	D.P. 2.10
12	.1890	3 5/8	D.P. 2.10
13	.1850	3 1/2	D.P. 2.10
14	.1820	3 5/8	D.P. 2.10
15	.1800	3 5/8	D.P. 2.10
16	.1770	3 5/8	D.P. 1.95
17	.1730	3 5/8	D.P. 1.95
18	.1695	3 5/8	D.P. 1.95
19	.1660	3 3/4	D.P. 1.95
20	.1610	3 5/8	D.P. 1.95
21	.1590	3 5/8	D.P. 1.75
22	.1570	3 3/4	D.P. 1.75
23	.1540	3 5/8	D.P. 1.75
24	.1520	3 1/2	D.P. 1.75
25	.1495	3	D.P. 1.75
26	.1470	2 1/8	D.P. 1.55
27	.1440	2 1/8	D.P. 1.55
28	.1405	2 3/4	D.P. 1.55
29	.1360	2 1/8	D.P. 1.55
30	.1285	2 1/8	D.P. 1.55
31	.1200	2 3/4	D.P. 1.40
32	.1160	2 1/8	D.P. 1.40
33	.1130	2 1/8	D.P. 1.40
34	.1110	2 5/8	D.P. 1.40
35	.1100	2 5/8	D.P. 1.40
36	.1065	2 5/8	D.P. 1.25
37	.1040	2 1/2	D.P. 1.25
38	.1015	2 5/8	D.P. 1.25
39	.0995	2 5/8	D.P. 1.25
40	.0980	2 3/4	D.P. 1.25
41	.0960	2 5/8	D.P. 1.10
42	.0935	2 5/8	D.P. 1.10
43	.0890	2 1/2	D.P. 1.10
44	.0860	2 5/8	D.P. 1.10
45	.0820	2 5/8	D.P. 1.10
46	.0810	2 1/2	D.P. .95
47	.0785	2 5/8	D.P. .95
48	.0760	2 5/8	D.P. .95
49	.0730	2	D.P. .95
50	.0700	1 1/8	D.P. .95
51	.0670	1 1/8	D.P. .95
52	.0635	1 5/8	D.P. .95
53	.0595	1 1/8	D.P. .95
54	.0550	1 1/8	D.P. .95
55	.0520	1 3/4	D.P. .95
56	.0465	1 1/8	D.P. .95
57	.0430	1 1/8	D.P. .95
58	.0420	1 5/8	D.P. .95
59	.0410	1 5/8	D.P. .95
60	.0400	1 5/8	D.P. .95

Straight Shank Twist Drill



Short Set
List No. 91

Diameter Inches	Length Over All Inches	Carbon Steel Price Per Doz.
1/16	2 1/2	D.P. \$1.00
5/64	2 3/4	D.P. 1.10
3/32	2 3/4	D.P. 1.20
7/64	2 3/4	D.P. 1.30
1/8	3	D.P. 1.45
9/64	3 1/2	D.P. 1.60
5/32	3 1/2	D.P. 1.80
11/64	3 1/2	D.P. 2.00
3/16	3 1/2	D.P. 2.20
13/64	3 5/8	D.P. 2.40
7/32	3 3/4	D.P. 2.65
15/64	3 5/8	D.P. 2.90
1/4	4	D.P. 3.15
17/64	4 1/2	D.P. 3.40
9/32	4 1/2	D.P. 3.65
19/64	4 3/4	D.P. 3.90
5/16	4 1/2	D.P. 4.20
21/64	4 5/8	D.P. 4.50
11/32	4 3/4	D.P. 4.80
23/64	4 7/8	D.P. 5.10
3/8	5	D.P. 5.40
25/64	5 1/2	D.P. 5.70
13/32	5 1/2	D.P. 6.00
27/64	5 3/4	D.P. 6.40
7/16	5 1/2	D.P. 6.80
29/64	5 5/8	D.P. 7.20
15/32	5 3/4	D.P. 7.50
31/64	5 7/8	D.P. 7.75
1/2	6	D.P. 8.00

Drill Set



List No. 5

Here's a mighty attractive, practical Drill Stand, designed in the form of our trade-mark. It contains a full set of Jobber's Straight Shank Drills, from 1/8 in. to 1/2 in. in "sixty-fourths." The stand is divided so that the thirty-second size drills occupy one-half, and the sixty-fourth sizes the opposite half. Each drill is placed in a hole properly marked, facilitating quick and proper selection.

Prices

Stand and Drills, complete.....D.P. \$13.66
Stands only.....D.P. \$2.77



TOOL KITS

Forty-Piece Mechanician Kit

A most complete assortment of highest quality tools, every one practical and indispensable, everything necessary for making all repairs on the road or in the garage.

Consists of the Following Tools:

- No. 23 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 25 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 27 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 29 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 31 Semi-finished 15-degree Angle Drop Forged Wrench.
- 10-inch Wood Handle Pipe Wrench.
- 9-inch Ebony Automobile Monkey Wrench.
- 5-inch Nickel Plated Bicycle Wrench.
- 5-inch Spark Plug Socket Wrench, japanned.
- 6-inch Nickel Plated Adjustable Combination Pliers.
- 3-inch Electrician's Round Shank Screw Driver.

- 5-inch Electrician's Square Shank Screw Driver.
- 9-inch Machinist's All-steel Screw Driver.
- 8-inch Square File with Handle.
- 3/4-inch Solid Punch, half-polished, 3/32-inch point.
- 5/16-inch Solid Punch, half-polished, 3/32-inch point.
- 3/8-inch Drift Punch, half-polished, 3/8-inch point.
- 3/8-inch Center Punch, half-polished.
- 1/2-inch Cape Chisel, half-polished.
- 3/8-inch Cotter Pin Extractor, full-polished.
- No. 1 Machinist's Bearing Scraper.
- 10-ounce Machinist's Ball Pein Hammer.
- 6-inch Side-cutting Pliers.
- 5-inch Offset Drop Forged Screw Driver.
- 3 Sheets Emery Cloth. 8-inch Round File with handle.
- Soldering Iron with handle. Box Solder Paste.
- Bundle 15 Copper Wire. Bundle 20 Copper Wire.
- 8-inch Hack Saw and Frame.
- 4-inch Flat File with handle.
- 1/2-inch Cold Chisel, half-polished.
- 3/8-inch Cold Chisel, half-polished. Bundle Wire Solder.
- Soldering Torch. Spark Plug Brush.
- 8-inch Flat File with handle. Box Assorted Cotter Pins.
- 2 1/2-inch Carriage-maker's Clamp.

40-piece Mechanician's Tool Kit, high grade tools in water-proof case, each.....\$15.00
Each, D.P. \$22.75

Thirty-four-Piece Chauffeur Kit

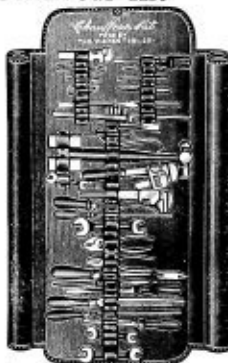
Designed to meet the demand for a medium-priced outfit. A choice assortment of practical tools, high grade and warranted perfect in quality and design. At the price this kit can not be excelled.

Consists of the Following Tools:

- No. 23 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 25 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 27 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 29 Semi-finished 15-degree Angle Drop Forged Wrench.
- 10-inch Wood Handle Pipe Wrench.
- 9-inch Ebony Automobile Monkey Wrench.
- 5-inch Nickel Plated Bicycle Wrench.
- 6-inch Adjustable Combination Pliers, Ebony.

- 3-inch Electrician's Round Shank Screw Driver.
- 5-inch Electrician's Square Shank Screw Driver.
- 5-inch Offset Drop Forged Screw Driver.
- 9-inch Machinist's All-steel Screw Driver.
- 5/16-inch Solid Punch, half-polished, 3/32-inch point.
- 3/8-inch Solid Punch, half-polished, 3/8-inch point.
- 3/8-inch Drift Punch, half-polished, 3/8-inch point.
- 3/8-inch Center Punch, half-polished.
- 3/8-inch Cotter Pin Extractor, full-polished.
- No. 1 Machinist's Bearing Scraper.
- 10-ounce Machinist's Ball Pein Hammer.
- 4-inch Side-cutting Pliers. Soldering Copper with handle.
- 4-inch Flat File with handle. Bundle Wire Solder.
- 8-inch Flat File with handle. Bundle 15 Copper Wire.
- 7-inch Round File with handle. Bundle 20 Copper Wire.
- 8-inch Square File with handle. Box Assorted Cotter Pins.
- 1/2-inch Cape Chisel, half-polished. Box Solder Paste.
- 3/8-inch Cold Chisel, half-polished. Spark Plug Brush.
- 3/8-inch Cold Chisel, half-polished.

34-piece Chauffeur Tool Kit, high grade tools in water-proof case, each.....\$12.00
Each, D.P. \$17.95



Thirty-Piece Motorist Kit

An excellent Kit, containing all tools necessary for making ordinary repairs. All tools of the highest grade and fully warranted. Case is heavy water-proof canvas with harness leather retaining straps. We recommend this kit to the automobile owners.

Consists of the Following Tools:

- No. 23 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 25 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 27 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 31 Semi-finished 15-degree Angle Drop Forged Wrench.
- 10-inch Wood Handle Pipe Wrench.
- 3-inch Ebony Automobile Monkey Wrench.
- Double Jaw "Ready Grip" Wrench, polished.
- 3-inch Electrician's Round Shank Screw Driver.
- 5-inch Electrician's Round Shank Screw Driver.
- 9-inch Machinist's All-steel Screw Driver.

- 5-inch Offset Drop Forged Screw Driver.
- 6-inch Ebony Adjustable Combination Pliers.
- 3/8-inch Solid Punch, half-polished, 3/8-inch point.
- 3/8-inch Center Punch, half-polished.
- 3/8-inch Cold Chisel, half-polished.
- 1/2-inch Cold Chisel, half-polished.
- 1/2-inch Cape Chisel, half-polished.
- 5/16-inch Cotter Pin Extractor.
- No. 1 Machinist's Bearing Scraper.
- 10-ounce Machinist's Ball Pein Hammer.
- File Handle.
- 8-inch Flat File.
- 6-inch Side-cutting Pliers.
- Spark Plug Socket Wrench.
- Box Assorted Cotter Pins.
- 8-inch Round File.
- 6-inch Three Corner File.
- 5-inch Black Bicycle Wrench.
- Bundle 15 Copper Wire.
- Bundle 20 Copper Wire.

30-piece Motorist Tool Kit, high grade tools in water-proof case, each.....\$9.00
Each, D.P. \$13.55

Twenty-Piece Commercial Kit

Made up of tools particularly adapted to use on a truck. All large, heavy tools selected for strength and extra quality. This set is used extensively by shop men in all vocations.

Consists of the Following Tools:

- No. 23 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 27 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 31 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 34 Semi-finished 15-degree Angle Drop Forged Wrench.
- 10-inch Wood Handle Pipe Wrench.
- 11-inch Mottled Automobile Monkey Wrench, with tire iron handle.

- 3-inch Electrician's Round Shank Screw Driver.
- 6-inch Electrician's Square Shank Screw Driver.
- 6-inch Offset Drop Forged Screw Driver.
- 9-inch Machinist's All-steel Screw Driver.
- 7-inch Flat File.
- 7-inch Round File.
- File Handle.
- 8-inch Mottled Adjustable Combination Pliers.
- 1/2-inch Solid Punch, half-polished, 3/8-inch point.
- 1/2-inch Cold Chisel, natural finish.
- 1/2-inch Cape Chisel, natural finish.
- 3/8-inch Cotter Pin Extractor, black.
- 1-pound Machinist's Ball Pein Hammer.
- Box Assorted Cotter Pins.

20-piece Commercial Tool Kit, high grade tools in case, each.....\$8.00
Each, D.P. \$11.90





TOOL KITS

Thirty-Piece Garage Kit

A Mechanic's Kit—containing an assortment of necessary tools for general repair work.

The case is of heavy brown duck and has adjustable webbing retainers in straps.

Consists of the Following Tools:

- No. 25 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 725 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 27 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 731A Semi-finished 15-degree Angle Drop Forged Wrench.
- 9-inch Ebony Auto Wrench.
- 5-inch Nickel Plated Bicycle Wrench.
- 5/8-inch Spark Plug Wrench.
- 4-inch Nickel Plated Pliers.
- 6-inch Ebony Adjustable Combination Pliers.
- 5-inch Square Shank Screw Driver.
- 6-inch Flat File.
- 8-inch Round File.
- 8-inch Half Round File.
- File Handle.

- 3/8-inch Center Punch, half-polished.
- 10-inch Prick Punch, half-polished.
- 5/16-inch Solid Punch, 3/32-inch point, half-polished.
- 3/8-inch Solid Punch, 1/4-inch point, half-polished.
- 3/8-inch Drift Punch, 1/4-inch point, half-polished.
- 3/8-inch Cold Chisel, half-polished.
- 7/16-inch Cold Chisel, half-polished.
- 3/8-inch Cape Chisel, half-polished.
- 1/2-inch Cape Chisel, half-polished.
- 5/16-inch Black Cotter Pin Extractor.
- 5-inch Offset Screw Driver.
- Sheet Emery Cloth.
- Bundle No. 15 Copper Wire.
- No. 1 Bearing Scraper.
- 10-ounce Machinist's Ball Pein Hammer.
- Spark Plug Brush.

30-Piece Garage Tool Kit, high grade tools in case, each...\$8.50
Each...D.P. \$12.77

Nine-Piece Little Roadster Kit

We maintain the same high quality of tools in this kit as in those preceding.

Consists of the Following Tools:

- No. 23 Unfinished 15-degree Angle Drop Forged Wrench.
- No. 25 Unfinished 15-degree Angle Drop Forged Wrench.
- No. 29 Unfinished 15-degree Angle Drop Forged Wrench.
- 9-inch Black Automobile Wrench.
- 4-inch Electrician's Round Shank Screw Driver.

- 3/8-inch Solid Punch, half-polished, 1/4-inch point.
- 3/8-inch Cold Chisel, natural finish.
- 6-inch Black Adjustable Combination Pliers.
- 8-ounce Machinist's Ball Pein Hammer.

9-Piece Little Roadster Tool Kit, each...\$2.50
Each...D.P. \$3.78

Seven-Piece Ford Tool Kit

This set contains all of the tools originally sent out with a Ford car and some additional tools that are very convenient to have.

Consists of the Following Tools:

- No. 27 Semi-finished 15-degree Angle Drop Forged Wrench.
- 9-inch Black Automobile Wrench.
- 3-inch Electrician's Round Shank Screw Driver.

- 6-inch Black Adjustable Combination Pliers.
- 5/8-inch Cold Chisel, natural finish.
- 5-inch Offset Screw Driver.
- 8-ounce Ball Pein Hammer.

7-Piece Ford Tool Kit, each...\$2.00
Each...D.P. \$3.00

Twenty-Piece Tourist Kit

This assortment is used by the majority of the medium priced car manufacturers and contains an assortment that appeals to the prospective buyer who will do most of his own repair work.

All high grade tools.
Consists of the Following Tools:

- No. 23 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 25 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 27 Semi-finished 15-degree Angle Drop Forged Wrench.
- No. 29 Semi-finished 15-degree Angle Drop Forged Wrench.

- Single Jaw Wrench, half-polished.
- 9-inch Ebony Automobile Wrench.
- 3-inch Electrician's Round Shank Screw Driver.
- 5-inch Electrician's Square Shank Screw Driver.
- 9-inch Machinist's All-steel Screw Driver.
- 7-inch Flat File.
- 6-inch Ebony Adjustable Combination Pliers.
- 3/8-inch Solid Punch, half-polished, 1/4-inch point.
- 3/8-inch Center Punch, half-polished.
- 1/2-inch Cold Chisel, half-polished.
- 1/2-inch Cape Chisel, half-polished.
- 5/16-inch Cotter Pin Extractor, Black.
- 10-ounce Machinist's Ball Pein Hammer.
- No. 1 Machinist's Bearing Scraper.
- Box Assorted Cotter Pins.
- File Handle.

20-Piece Tourist Tool Kit, high grade tools in case, each...\$6.00
Each...D.P. \$8.88

Handy Kit



All tools in this kit are correctly finished and are fully warranted.

Contents.—1 Victor Universal Combination Pliers, 1 Victor Adjustable Alligator Wrench, 1 Diamond Point Chisel, 2 Cold Chisels, 2 Cape Chisels, 1 Oval Face Chisel, 2 Center Punches, 2 Solid Punches, 1 Cotter Pin Extractor, 1 Three-Square Scraper.

Handy Tool Kit, each...\$1.00
Each...D.P. \$6.66

Kit No. 77

All tools in this kit have a beautiful blue finish and are warranted in every respect.

Contents

- 1 Three-Square Scraper.
- 1 Cotter Pin Extractor.
- 1 Diamond Point Chisel.
- 1 Cape Chisel.
- 1 Oval Face Chisel.
- 2 Solid Round Punches.
- 2 Cold Chisels.
- 1 Center Punch.

No. 77 Tool Kit, each...\$2.00
Each...D.P. \$3.33



AIR COMPRESSORS FOR GARAGE SERVICE

The Model Garage, irrespective of size, finds many applications for compressed air, from both a standpoint of economy and greater convenience, as well as forming one of the necessities which either recommend or disapprove of the garage to the automobile owner. Among the numerous applications may be mentioned the following: Inflating tires; cleaning tops and bodies; operating small pneumatic tools, such as air hoists, riveting and chipping hammers, drills, etc.

In this "day of service," nothing is so important as the dispensing of "FREE AIR." It brings trade to your front door, and will return your initial investment in a short time.

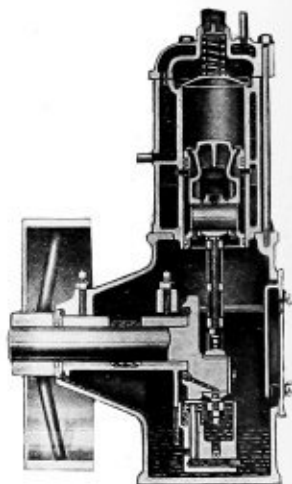
We have sold Compressor equipment for hundreds of garages, and in offering the Ingersoll-Rand line, believe we have found the best manufactured for the purpose. They are built along the most up-to-date engineering lines, by the oldest Compressor manufacturer in America, a concern that has built compressors with capacities as high as 1,000,000 cubic feet per hour and for every conceivable service. We have had experience with numerous other compressors, and investigated all other makes before adopting this line, and offer it to our trade as the most efficient and economical manufactured.

If you desire motor-driven equipment, write our Engineering Department, giving us the size of your place, the number of cars you handle and the nature of power used, whether electric or belt drive. If electric, specify whether Alternating or Direct Current. If Alternating, give the voltage, number of phases, number of cycles (frequency), and if Direct Current, voltage only. We will be glad to prepare an estimate of cost and installation.

We have an equipment for every size garage, belt or motor driven, water or air cooled, stationary or portable.

The illustration shows the IMPERIAL TYPE XII Compressor in section. The general sturdiness of the design is seen at a glance; they are durably constructed, self-oiling and wholly enclosed. The method of lubrication is plentiful and thorough. All bearings are adjustable. Capacities range from 3 to 44 cubic feet per minute.

Unlike the majority of compressors offered for this service, the "Imperial" is built with a view to economical operation. The suction stroke completely fills the cylinder without waste of power (note the very large valve in the piston head). On the discharge stroke every ounce of air is instantly expelled, as the discharge valve has the same diameter as the cylinder, and is not (like most other compressors) fitted with small poppet valves which restrict the passage of air, set up friction, create losses and consume power.



Air Receivers or Storage Tanks

The installation of your Compressor plant is incomplete unless you have a satisfactory receiver or storage tank. This is essential, as it cuts down your power expense and gives you a ready supply at instant command. Best results are obtained when large capacity receivers are used, as with a proper sized receiver it is only necessary for you to operate your compressor a few times each day (depending on the demand for air).

We carry a complete line of Electrically Welded Seamless Tanks, made of the very best Open Hearth Basic Steel Plates. They are built to stand extremely high pressures, are thoroughly tested and guaranteed by us to be air tight.

In addition to the tank, certain fittings and accessories, such as gauges, hose, air valves, safety valves, air chucks, etc., are required. We refer you to our lists of these articles, which cover the best in the market.



AIR COMPRESSORS FOR GARAGE SERVICE

Imperial Type XII

Size 2 x 2½



This is the smallest of the Imperial line and is recommended for intermittent service and for pressures up to and including 150. It will serve a garage housing from 15 to 20 cars. It is furnished in the Air Cooled Type only.

We recommend for this compressor, air receiver 16x48—42-gallon capacity.

Piston displacement, 3.2 cu. ft. free air per minute.

Speed.....400 to 700 R.P.M.

Horse Power required.....One

Belt Wheel...10-in. diam. by 2½-in. face

Length over all.....14½-in.

Width.....10-in.

Height.....20-in.

Weight.....35 lbs. net

Shipping weight.....150 lbs.

Price with tight pulley only.....D.P. \$61.00

Price, with tight and loose pulleys.....D.P. 69.00

Imperial Type XII

Size 2½ x 3

Air Cooled Type. This size has larger capacity than the 2x2½-in., and is recommended for pressures up to 175 lbs., and is adaptable for garages handling from 20 to 30 cars.

Can be furnished either air cooled, water circulating cooling, or reservoir cooling systems.

We recommend for this compressor, air receiver 18x60—46-gallon capacity.

Piston displacement, 6 cu. ft. free air per minute.

Horse Power required.....1½

Belt Wheel...12-in. diam. by 3-in. face

Speed.....400 to 700 R.P.M.

Length.....17-in.

Width.....12-in.

Height.....22½-in.

Weight.....160 lbs. net

Shipping weight.....220 lbs.

Price with tight pulley only (air cooled).....D.P. \$83.00

Price with tight and loose pulleys (air cooled).....D.P. 94.00



Imperial Type XII

Size 2½ x 3



Hopper Cooled Type. This compressor is exactly like the 2½x3-in. shown above, except that the method of cooling is different. The cylinder is jacketed, which, in conjunction with a reservoir head, to which communication is had by ports, forms a very efficient thermo-siphon system. Under average temperature conditions, one filling of the reservoir will permit continuous running of the compressor for a full day. We recommend this type of cooling.

We recommend for this compressor, air receiver 18x60—46-gallon capacity.

Piston displacement, 6 cu. ft. free air per minute.

Speed.....400 to 700 R.P.M.

Horse Power required.....1½

Belt Wheel...12-in. diam. by 3-in. face

Length.....17-in.

Width.....12-in.

Height.....29-in.

Shipping weight.....245 lbs.

Reservoir Type—

Price with tight pulley.....D.P. \$90.00

Price with tight and loose pulleys.....D.P. 101.00

Water Circulating Type (Tank System)—

Prices same as Hopper Cooled Type.

Imperial Type XII

Size 3½ x 4



Water Circulating Type (tank system). This size compressor is for the garage housing up to 75 cars. It is of very rugged construction and large capacity. It will handle pressures up to 200 lbs., running intermittently and will take care of 150 lbs. operating constantly.

We recommend for this compressor, air receiver 18x72—80-gallon capacity.

Piston displacement, 12.2 cu. ft. free air per minute.

Speed.....350 to 550 R.P.M.

Horse Power required.....3

Belt Wheel...16-in. diam. by 4-in. face

Length.....19½

Width.....16-in.

Height.....29-in.

Weight.....net 275 lbs.

Shipping weight.....315 lbs.

Price with tight pulley only.....D.P. \$155.00

Price with tight and loose pulleys.....D.P. 170.00

Imperial Type XII

Size 3½ x 4

Hopper Cooled Type. This machine is a duplicate of that shown above differing only in that it has the reservoir thermo-siphon cooling system and shows the tight and loose pulley arrangement. Where a compressor is to be operated from a line shaft, tight and loose pulleys make the ideal drive, making it easy to shut down without the use of a clutch on the line shaft.

We recommend for this compressor, air receiver 18x72—80-gallon capacity.

Piston displacement, 12.2 cu. ft. air per minute.

Speed.....350 to 550 R.P.M.

Horse Power required.....3

Belt Wheels...16-in. diam. by 4-in. face

Length.....25-in.

Width.....16-in.

Height.....35-in.

Shipping weight.....400 lbs.

Price with tight pulley only.....D.P. \$155.00

Price with tight and loose pulleys.....D.P. 170.00



Imperial Type XII

Size 4½ x 5



Water Circulating Type (tank system). This compressor is the largest of this type, and is built for those garages handling 100 cars or more. Its capacity is so large that it will meet the largest demands for equipment of this class. It is of exceptionally heavy construction and will operate continuously at 200 pounds pressure.

We recommend for this compressor, air receiver 24x60—120-gallon capacity.

Piston displacement, 23 cu. ft. free air per minute.

Speed.....325 to 500 R.P.M.

Horse Power required.....5

Belt Wheels...20-in. diam. by 5-in. face.

Length.....32-in.

Width.....20-in.

Height.....37½-in.

Shipping weight.....530 lbs.

Price—

Either Hopper Cooled Type or Water Circulating Type (tank system).

With tight pulley only.....D.P. \$222.00

With tight and loose pulleys.....D.P. 244.00



MOTOR DRIVEN AIR COMPRESSORS FOR GARAGE SERVICE

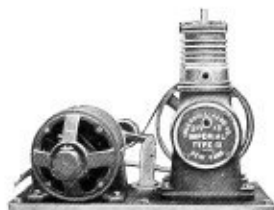
The compressor outfits shown below represent the most simple, compact and efficient electrically driven units on the market.

They are practically noiseless in operation and supply the maximum demand both from a standpoint of capacity, quality and inexpensiveness of operation.

The compressors are the same as those described under the heading of "Imperial Type XII."

The driving end is a General Electric motor of the most approved design, combining highest efficiency with economical operation. These motors are either direct or alternating current, direct connected to the compressor by an "Imperial" short belt drive attachment, and the whole mounted on a suitable sub-base as shown, all ready for work after bolting to the foundation and plugging into the lighting circuit.

When ordering state kind of current used, whether direct or alternating. If direct give the voltage. If alternating specify voltage, number of phases, number of cycles (frequency).



Imperial Type XII Motor Driven Air Compressor Mounted on Sub-Base

Size 2 x 2 1/2-in.

This is a standard 2x2 1/2-in. compressor direct connected to a 1-H. P. motor. The capacity of the compressor is given on the preceding page.

This size is furnished in Air Cooled only.

With Single Phase Motor.....	D.P. \$217.00
With Two or Three Phase Motor.....	D.P. 172.00
With Direct Current Motor.....	D.P. 190.00

Imperial Type XII Motor Driven Air Compressor Mounted on Sub-Base

Size 2 1/2 x 3-in.

Cut shows hopper cooled type. Can be furnished in air cooled, hopper cooled or water circulating type (tank system). Is equipped with 1 1/2-H.P. motor.

Air Cooled—

With Single Phase Motor.....	D.P. \$294.00
With Two or Three Phase Motor.....	D.P. 217.00
With Direct Current Motor.....	D.P. 247.00

Hopper or Water Circulating Cooling—

With Single Phase Motor.....	D.P. 301.00
With Two or Three Phase Motor.....	D.P. 224.00
With Direct Current Motor.....	D.P. 254.00



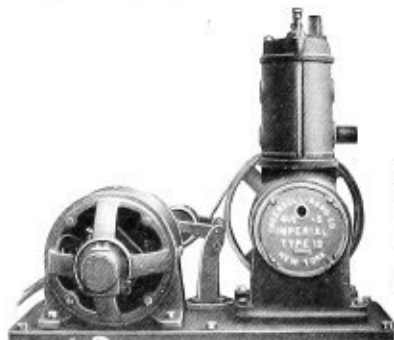
Imperial Type XII Motor Driven Air Compressor Mounted on Sub-Base

Size 3 1/2 x 4-in.

Cut shows water circulating type (tank system). Can be furnished in hopper cooled or water circulating types only. Is equipped with a 3-H. P. motor.

With Single Phase Motor.....	D.P. \$432.00
With Two or Three Phase Motor.....	D.P. 321.00
With Direct Current Motor.....	D.P. 400.00

These prices apply to either hopper or water circulating (tank system) types.



Imperial Type XII Motor Driven Air Compressor Mounted on Sub-Base

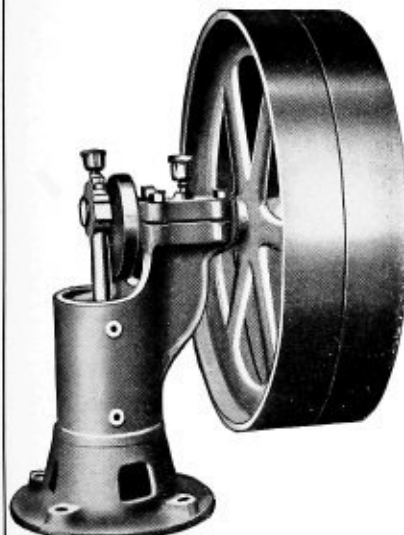
Size 4 1/2 x 5-in.

Can be furnished in either hopper cooled or water circulating type. Is equipped with a 5-H. P. motor.

With Single Phase Motor.....	D.P. \$562.00
With Two or Three Phase Motor.....	D.P. 410.00
With Direct Current Motor.....	D.P. 525.00



AIR COMPRESSORS FOR GARAGE SERVICE



Single Cylinder Water Jacket Type
With Flywheel and Loose Pulley

Jacobson Garage Compressors

SPECIFICATIONS:

Cylinder size	3-in. bore, 4-in. stroke
Normal speed	200 R.P.M.
Capacity free air per minute	3½ cu. ft.
Compresses at any pressure up to	200 lbs. per sq. in.
Diameter and face of fly wheel for belt	24-in. x 3-in.
Diameter and face of loose pulley for shifted belt	24-in. x 3-in.
Power required operating at 100 pound pressure	¾ H. P.
Power required operating at 200 pound pressure	1½ H. P.
Size of water pipe connections	¾-in.
Size of air delivery pipe	½-in.
Each	D.P. \$76.00
If furnished with Fly Wheel only, each	D.P. 63.50

We carry a full line of Jacobson Single and Double Cylinder Compressors. Prices on request.

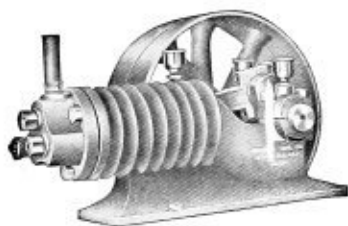
Belt Driven Air Compressors

THE NO. 100 HORIZONTAL BELT-DRIVEN AIR COMPRESSOR

Height 4½ inches, width 8 inches, length 11 inches, net weight 23 pounds, boxed 30 pounds; will supply one foot of air and 135 pounds tank pressure operating at 350 R.P.M., and requires ¼ H. P. Safety valve in cylinder head.

Price with 8-inch tight and loose pulleys	D.P. \$32.00
No. 101 Brunner Vertical Belt Driven	D.P. 39.00
No. 102 Brunner Vertical Belt Driven	D.P. 68.00

We can also furnish all other sizes and types of Brunner Air Compressors. Send for prices.



No. 100 Compressor

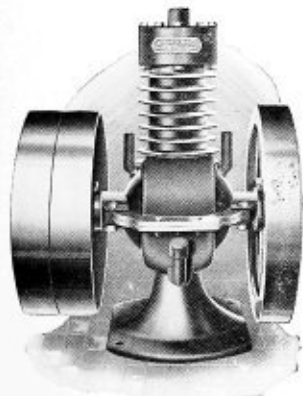
Au-To Air Compressor

Specifications No. 0 Au-to Air Compressor

Cylinder	3-inch bore
Piston stroke	4 inches
Fly wheels	14 inches diameter
Pulleys	13 inches diameter, 2-inch crown face
Height from floor to top	21 inches
Floor space	14x18 inches

Assembled at the factory and delivered set up ready to put the belt on and make pipe connections.

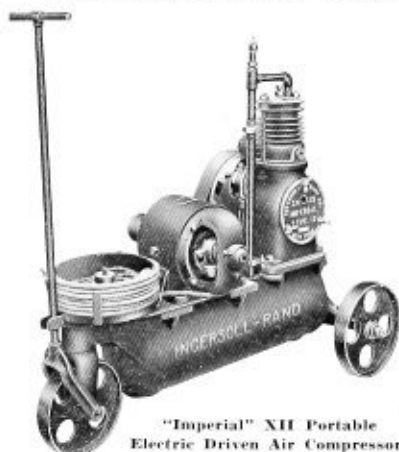
Each	D.P. \$61.00
------	--------------





AIR COMPRESSORS AND AIR STORAGE TANKS

Air Compressors for Garage Service



"Imperial" XII Portable
Electric Driven Air Compressor

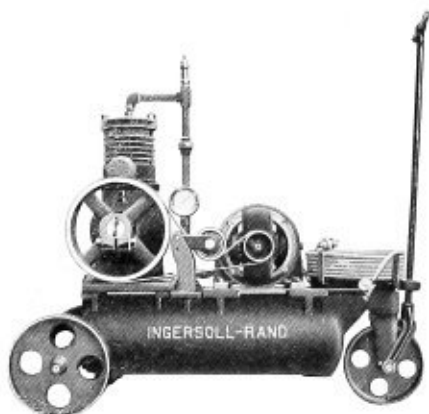
Portable Type

With this type of compressor you are able to take the air just where it is wanted, without the attendant expense of piping.

The portability of this unit, and its compactness, recommend its use to garages where a stationary plant is impracticable.

The outfit consists of an Air Cooled Compressor, "short-belted" to the proper motor either 110 or 220 volt direct current or 110, 220 or 440 volt

single two or three phase alternating current, mounted on a strong three-wheeled truck, the body of which forms the air receiver, twenty feet of hose with tire chuck and gauge, and twenty feet of cord with attachment plug and pan for carrying hose and cord. The reel on which the hose is carried is actuated by a spring and the hose is automatically coiled up when not in use.



Dimensions

Length over all.....	50 inches
Width over all.....	24 inches
Height from floor.....	48 inches
Shipping weight with D. C. motor.....	650 pounds
Shipping weight with A. C. motor.....	700 pounds

Price includes necessary wrenches and equipment described above.

With 2 x 2½ in. Compressor (Air Cooled)—

1 H. P. Single Phase Motor.....	D.P. \$333.00
1 H. P. Two or Three Phase Motor.....	D.P. 288.00
1 H. P. Direct Current Motor.....	D.P. 300.00

With 2½ x 3 in. Compressor (Air Cooled)—

1½ Single Phase Motor.....	D.P. \$400.00
1½ Two or Three Phase Motor.....	D.P. 333.00
1½ Direct Current Motor.....	D.P. 355.00

For prices on other sizes and water cooled types for portable service, write our Engineering Department.

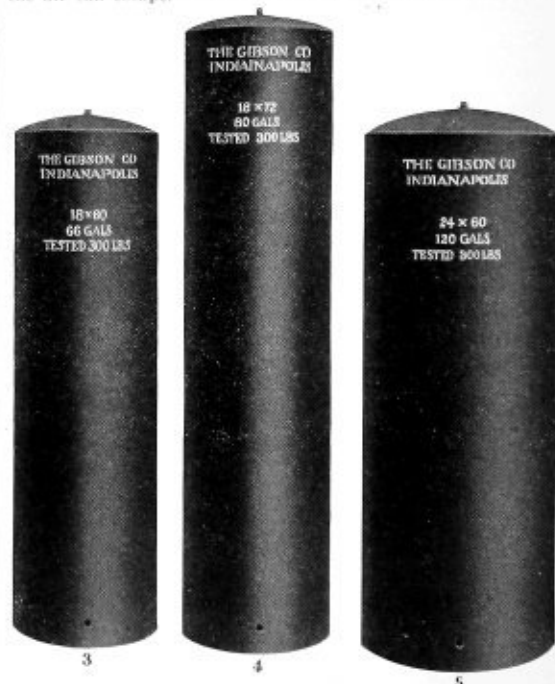
High Pressure Air Storage Tanks for Compressor Service

Electrically Welded

One of the chief and most important elements in connection with the stationary compressor plant is a suitable and strong air receiver or tank. We carry a complete line of Air Storage Tanks for the purpose of storing the reserve air. These tanks are without exception the very highest grade in material, design and workmanship. They have been built for this particular purpose and every care has been exercised to obtain a receiver that would be entirely safe at extremely high pressures. They are made of the very best uniform basic open hearth steel plate, all seams welded, making the tank virtually one piece of metal. Our tanks eliminate the possibility of any leaks as the special process of electric welding imparts the full strength of the material at the welded joint. In other words, the welded tank is greatly superior to and stronger than a riveted tank of twice the thickness. There are no rivet holes through which the air can escape.



The above Tanks are all black finish; they are painted with water-proof asphaltum paint. If galvanized tanks are desired add 20 per cent. to the net dealer's prices on any of the sizes shown.



Prices of Tanks

No. 1.....	14 x 30	20 gallons	D.P. \$16.10
No. 2.....	16 x 48	42 gallons	D.P. 27.20
No. 3.....	18 x 60	66 gallons	D.P. 49.30
No. 4.....	18 x 72	80 gallons	D.P. 55.50
No. 5.....	24 x 60	120 gallons	D.P. 88.80

The above Tanks are all black finish; they are painted with water-proof asphaltum paint. If galvanized tanks are desired add 20 per cent. to the net dealer's prices on any of the sizes shown.

We can furnish tanks in any size and of any capacity built for every pressure.



ACCESSORIES FOR AIR COMPRESSING PLANTS

There are certain fittings necessary when a compressor plant is installed. These consist of valves, gauges, etc. We carry a complete line of these fittings, all manufactured expressly for air service. They are made of the very best bronze, with seats ground true. The gauges are calibrated and accurate. The safety or pop valves will relieve at any determined pressure.

Those articles absolutely necessary in fitting up a compressing plant are:

- 1 Air Pressure Gauge, for determining pressure in tank.
- 2 Needle Valves, one between compressor and tank, and one at tank outlet.
- 1 Needle Valve with swivel hose coupling, for attaching hose at line outlet.
- 1 Pop Safety Valve, to be placed on tank as a matter of safety and to prevent accumulation of pressure.
- 1 Check Valve, to be placed between the compressor and tank. This relieves the compressor when idle and prevents leakage from tank at the same time.

Hose, Air Chucks and Hose Clamps.

We also suggest, if the Compressor is to be electrically driven, one of the special Electric Compressor Controllers shown on another page.

Air Pressure Gauge



This is a thoroughly dependable tested gauge with an iron case, and a guaranteed hand calibrated movement, especially designed for garage service. It has a 2 1/2-inch face, and a 1/2-inch male pipe thread.

Each D.P. \$4.44

Tank Safety Pop Valve

This is a solid brass valve that can be set to blow off at any desired pressure up to 175 pounds; it is not absolutely necessary when a Brunner Compressor is used, as they are all equipped with accurate working safety valves in the cylinder heads, but is an absolutely necessary fitting for tanks with compressors not so equipped. Guaranteed the best valve made for garage service.

Each D.P. \$4.44



Check Valves, Vertical and Horizontal

This valve is absolutely necessary on the pipe line between the compressor and tank for the purpose of relieving the compressor valves when compressor is idle, and holding the tank pressure.

Solid brass with renewable seat.

Threaded for 1/2-inch pipe, each D.P. \$1.78

Half-inch ball check valve, each D.P. 4.90

Brass Union for 1/2-inch inlet, each D.P. .88

Specify whether vertical or horizontal type is wanted.



Bronze Needle Valve No. 83

This is a heavily constructed, quick-seating brass valve with a 3/4-inch or 1-inch female thread on both ends for the pipe line, and one should be placed in the pipe line close to the tank, both on the inlet and the outlet pipe, for use in case of emergency. These valves are made for high air pressures and are guaranteed to do the work just the way you want it done. It pays to conserve your air supply, and these valves will do it.

Each D.P. \$2.22



Bronze Needle Valve with Hose Coupling

This is a heavy brass, quick-seating needle valve with a 3/4-inch or 1-inch male thread on one end to screw into the pipe line terminal on one end, and a swivel hose coupling for the hose line on the other end, and will improve any garage air line. Made especially for garage service and guaranteed right.

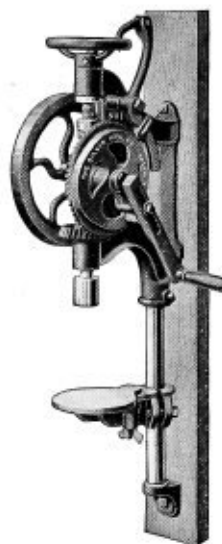
Each D.P. \$2.66

We also carry a complete line of standard Valves and Fittings for Air, Water or Steam Service. We can furnish these in Angle, Check, Globe or Gate types. When in need of these articles send us your order; we will furnish the best the market affords and at prices that will prove satisfactory.





PORTABLE POST DRILLS



No. 731 Double Geared, Self-Feed Post Drill

Hand Operated

The line of Post Drills shown on this page are produced by one of the oldest and largest manufacturers of this class of equipment. They are built by skilled mechanics. Every part is selected and guaranteed by the manufacturer. They are rigid, powerful, yet simple in construction.

Floor space over all 9x16 in. Total height, 37 in. Upright column, 12-in. diameter. Drive gear wheel 8-in. diameter. Table 6-in. diameter. Greatest distance between spindle and table 10½ in. Fly wheel diameter 10½ in. Has extension crank and adjustable feed. Drills ½-in. to center of 12-in. circle. Drill spindle is 1 in. steel and border for ½-in. straight shank drills. Feed has run of 2½-in.

No. 731.....D.P. \$12.75
Weight, 80 lbs.

Nos. 642-644 Ball Bearing Self-Feed Post Drills

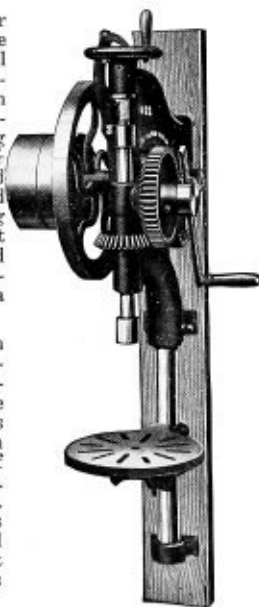
Hand and Belt Operated.

This Drill is adaptable for light and medium work. The intermediate gear wheel eliminates necessity of turning crank reverse direction on slow speed. Has adjustable table. The ball bearing feed nut saves 20% to 50% in power. Drill has ground bearings, machine moulded gears and automatic feeding device, which give an almost continuous feed. The feed can be increased or diminished by simply turning a thumb screw.

Size of spindle 1 in. Run of spindle 3¼ in. Size of column 1½ in.; greatest distance of spindle to table 13-in.; spindle turns 1½ times to one turn of crank on high speed. Drills to center of 15-in. circle and up to 1½-in. holes; spindle bored for ½-in. round shank drills, unless otherwise ordered. Total height, 48 in. When belt driven, speed of pulleys should be 250 R.P.M.

No. 642 for Hand Power only.....D.P. \$16.65
Weight, 115 lbs.

No. 644 Fitted for Belt Drive.....D.P. 24.50
Weight, 130 lbs.



Nos. 646-648 Ball Bearing Self-Feed Post Drills

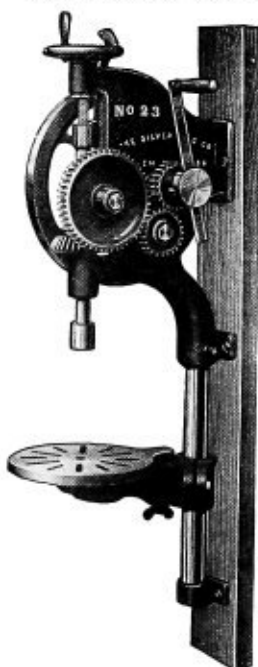
Hand and Belt Operated.

This type drill is similar to the 642, but is of heavier construction and larger in size. It will handle much heavier work. All bearings, like those on the highest priced drills, are ground from the solid metal to a working fit. Gears are machine molded and perfect mesh. Table moves up or down or to either side.

Size of spindle 1½ in. Run of spindle 4 in. Size of column 2 in. Greatest distance of spindle to table, 16 in. Spindle turns 1½ times to one turn of crank on high speed. Drills to center of 18-in. circle and up to 1½-in. holes. Spindle bored to ½-in. shank holes unless otherwise specified. Total height 50 in. When belt driven, speed of pulleys should be 250 R.P.M.

No. 646 for Hand Power only.....D.P. \$27.75
Weight, 170 lbs.

No. 648 fitted for Belt Drive.....D.P. 34.50
Weight, 185 lbs.



Nos. 650-652 Extra Heavy Ball Bearing Self-Feed Post Drill

Hand or Belt Operated.

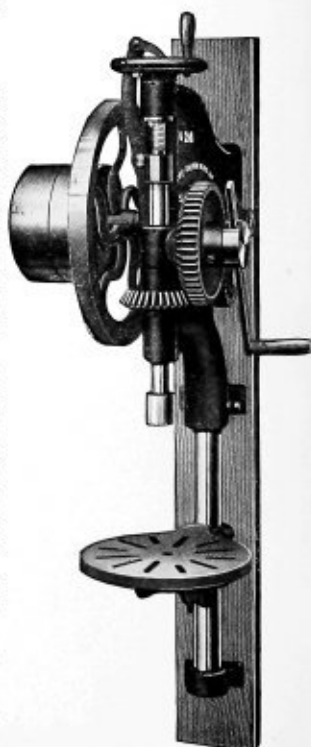
This is the heaviest Post Drill built, is adaptable to the heaviest class of work that can be handled by drills of this type. Has two speeds, self feed, adjustable feed table, is strongly built and very durable.

Equipped with new ball bearing feed nut, giving highest efficiency with minimum friction. This feed nut takes up all thrust and prevents lost motion.

Size of spindle 1½ in. Run of spindle 4½ in. Size of column 2½ in. Greatest distance of spindle to table 18 in. Spindle turns 1½ times to one turn of crank on high speed. Drills to center of 22-in. circle and up to 1½-in. holes. Spindle bored for ½-in. shank drills unless otherwise specified. Total height, 54 in. When belt driven, speed of pulleys should be 250 R.P.M.

No. 650 for Hand Use only.....D.P. \$42.50
Weight, 230 lbs.

No. 652 for Belt Drive.....D.P. 49.00
Weight, 245 lbs.





FORGES

We carry a complete line of Forges. All modern Repair Shops and Garages have constant need for one of these appliances. Can be used for heating forgings, preheating parts before welding and for those purposes usual to all blacksmith work. The line we offer is the best on the market, strongly built, and designed with a view to giving long and efficient service.

No. 931 Four-Leg Lever Forge With Hood

This Forge, while low in price, is very strong and durable. It is neat and symmetrical in design, is made of cast iron with $\frac{3}{4}$ -inch pipe legs, which are firmly screwed into the hearth and are tied together with wrought iron bands to insure rigidity while in action.

The lever operates a segment gear on a ratchet, permitting a reverse motion while the drive wheel revolves rapidly, giving a steady blast.

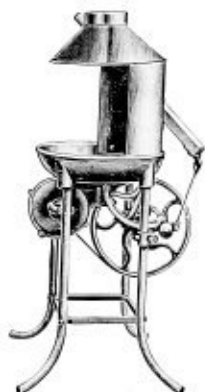
Height of forge, 30 inches.

Diameter of hearth, 18 inches; 34 inches deep.

Diameter of fan case, 8 inches.

Floor space over all, 20 inches by 23 inches.

Each.....D.P. \$14.00



No. 931

No. 905 Portable Forge With Hood

This Forge is of somewhat heavier design than the one shown above. The lever, supported on a swivel, follows the motion of the arm while in use. The clutch is of special design that insures positive action. The boxes are provided with oil cups and the shafts are correctly fitted into the bearings. The shaft is provided with ball bearings, which lighten the draft and save wear. The fireplace is separate from the hearth, which saves breakage in expansion and shrinkage of these parts.

Height of forge, 30 inches.

Size of hearth, 22 inches diameter.

Size of fan, 9 inches diameter.

Floor space over all, 24 inches by 36 inches.

Each.....D.P. \$23.40



No. 905

No. 913 Portable Steel Forge With Mechanical Blower

This Forge is built with a hearth 22 inches diameter. It is a light, stiff tool, easily handled and extremely durable. A general all-purpose forge for all garage work.

The tuyere (blow) pipe is cast solid with the special clamp for the legs and forms a support at one end for the mechanical blower. The fire pot is heavy and has shaker, also ash outlet.

The gears revolve in a bath of oil and the blower is almost noiseless. This machine has a strong, steady blast and is adaptable for the heaviest class of work.

Height from floor, 30 inches.

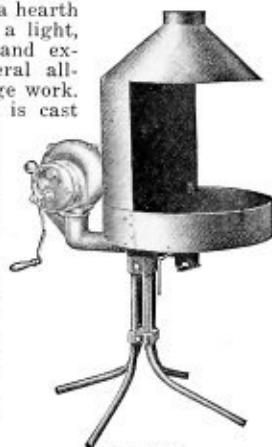
Spread of legs 32 inches.

Diameter of fan, 10 inches.

Floor space, 36 inches by 41 inches.

No. 943 without hood, each.....D.P. \$41.00

No. 944 with hood, each.....D.P. 46.60



No. 943

No. 948 Square Steel Forge With Mechanical Blower

We suggest this forge where a large amount of work is handled. Attention is called to the very heavy construction, large hearth 24x24 inches, which will accommodate the largest pieces found in the average garage and machine shop.

The hearth and hood are of the very best heavy gauge sheet steel, well and neatly put together. The tuyere (blowpipe) is cast with a heavy firepot and has ash shaker and ash pit as shown. Is equipped with the same style high grade blower as shown in Figure 943.

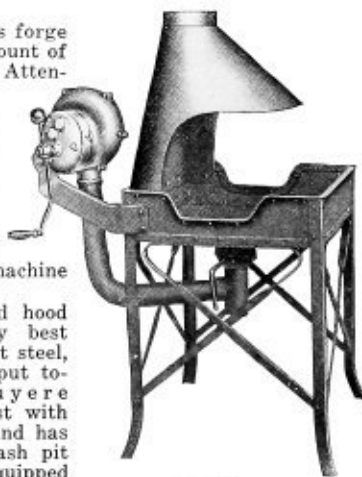
Height from floor, 30 inches.

Diameter of fan, 10 inches.

Floor space, 31 inches by 39 inches.

No. 947 without hood, each.....D.P. \$48.80

No. 948 with hood, each.....D.P. 54.40

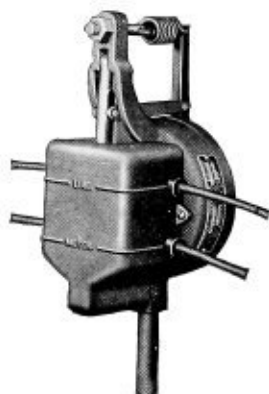


No. 948



SWITCHES, MAGNETIZERS, ETC.

Automatic Electric Pressure Controlled Switch



For Motor Driven Air Compressors

This Switch is one of the greatest labor saving devices ever invented. It is used in connection with Motor Driven Air Compressors. This Switch prevents the possibility of getting too much pressure in the tank, and also insures a constant pressure and volume of air at all times. Under ordinary circumstances, it is necessary for the garage man to watch the gauge on his tank to tell when he has sufficient pressure, and then throw off the current. In like manner when the tank gets low he must turn on the switch. Very often all the reserve pressure is exhausted before it is discovered and loss of time is certain. With this Automatic Electric Pressure Controlled Switch, your motor is started when the pressure falls to a certain point and is automatically shut off when it reaches the desired tank pressure. For instance you can have it adjusted to start the motor when the pressure falls to 100 pounds and have it shut off when the pressure reaches 150 pounds—or it can be set to handle a maximum variation of five pounds—any combination of pressures can be had.

Will operate on any motor of 3-HP or less.

Price D.P. \$55.50

Electric Soldering Irons

These Calorized Soldering Irons are one of the most useful and convenient tools on our list of shop equipment. They are connected direct to your lighting circuit by means of a lamp cord and socket. They dispense entirely with the necessity for the usual gasoline furnace or fire pot. All that is necessary in the operation of these soldering irons is to turn on the switch and in a very short time you have a constant, steady heat. There is no trouble from getting it too hot or the usual difficulty from cooling off and having to reheat as is the case where fire pots are used. They have a cool wire wound handle.

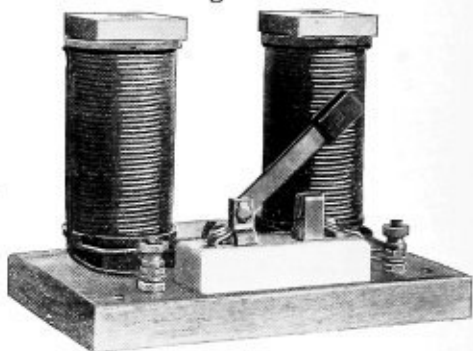
We recommend one of these for every garage in America. This is one of those prime necessities.



Cat. No.	Diam. of Tip in In.	WEIGHT		Complete in Oz.	Watts
		Tip	2 oz.		
153506	$\frac{1}{2}$	2	oz.	25	75—D.P. \$ 7.92
153507	$\frac{3}{4}$	$\frac{1}{2}$	lb.	28	100—D.P. 8.32
153508	1	1	lb.	33	150—D.P. 8.70
153509	1 $\frac{1}{2}$	2	lb.	42 $\frac{1}{2}$	200—D.P. 10.00
153510	1 $\frac{1}{2}$	3	lb.	54	275—D.P. 11.25

95 to 125 volts only.

Magnetizer



For Magnetizing Magneto Magnets

This Magnetizer is a simple inexpensive device that is needed in every garage. It is used for remagnetizing or charging the magnets used on all types of magnetos.

It consists of a powerful electro-magnet of superior design mounted on a neat wooden base on which a switch and two binding posts are attached, as shown in the illustration.

A well charged six-volt storage battery is connected to the binding posts and on closing the switch the Magnetizer becomes a powerful magnet, and will re-charge any permanent magnet used on magnetos.

Garages will find a need for this in overhauling and repairing ignition systems. It will put new life and vigor into old magnetos.

This Magnetizer weighs 8 pounds.

Size, 7 x 4 $\frac{1}{2}$ x 5 $\frac{1}{2}$ inches.

Price D.P. \$16.65

Fitted with Special Attachment for Ford Magnetos, complete D.P. \$18.90

Wagner Alternating Current Rectifier

For Charging Small Storage Batteries

This is a very convenient proposition for the small garage or motorist who wishes to charge his own storage battery.

The Wagner Portable Rectifier automatically converts alternating to direct current on the vibrating principle. As its name implies it can be moved from place to place without difficulty and is easily operated. All that is necessary to start this Rectifier to work is to screw the plug connection into a convenient lamp socket, connect two leads to the storage battery, turn on the current and the battery is charging.



This machine will handle one 6-volt battery of three cells, and is also made in larger sizes as shown below.

Amperes	Volts	No. Cells	Price Without Ammeter	Price With Ammeter
			D.P.	D.P.
5	6	3	\$55.50	\$71.00
5	8	4	62.20	77.70
7 $\frac{1}{2}$	6	3	71.00	86.50

Be sure to specify type and voltage when ordering.



ELECTRIC DRILLS AND GRINDERS

Type "U" Electric Drills



Type 2U, 24U

Every garage and repair shop has a constant need for an Electric Drill or Grinder. They are the handiest tools ever invented, they enable the operator to drill and grind in the corners and places where it would be impossible to work with any other kind of drill or grinder. They are economical to operate and the initial cost is small. The line we show is produced by a concern who has been making this class of machinery for many years. These machines are as light as possible consistent with the power developed.

Each machine is guaranteed covering operation material and workmanship for one year from date of purchase.

These grinders and drills are ball-bearing throughout, these bearings are enclosed in dust-proof grease chambers, this pre-

vents chattering and wear. All motors are impregnated with Bakelite, which prevents short-circuits and magnetizing.

Motors are force-ventilated by means of fan mounted on armature shaft which expels warm air that is replaced by cool air.

All grinders are thoroughly tested at the factory under actual working conditions before shipment. All drills are subjected to the same test.

Type "U" Universal Drills



Type 3U, 4U

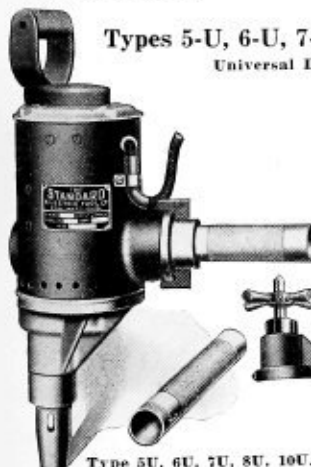
Note the illustrations on this page covering the series "U" drills. They are the best drills of this type ever offered.

Type "U" drills will operate on Direct or Alternating Current of 60 cycles or less. Either 110 or 220 volts. Variable speed.

Type	Drills in Steel	Reams	Speed R.P.M.	Weight Lbs.	Price D.P.
2U	1/2 in.	....	900	12	\$100.00
24U	5/16 in.	....	800	14	112.00
3U	3/8 in.	....	700	17	122.00
4U	1/2 in.	....	450	24	155.50

Types 5-U, 6-U, 7-U, 8-U, 10-U

Universal Drills



Type 5U, 6U, 7U, 8U, 10U

These are the heavier of the "U" series. They have larger capacities and are designed for handling large volumes of work.

Type "U" Drills will operate on Direct or Alternating Current of 60 cycles or less. Either 110 or 220 volts. Variable speed.

Type	Drills in Steel	Reams	Speed R.P.M.	Weight Lbs.	Price D.P.
5U	3/8 in.	5/16 in.	400	26	\$166.50
6U	1/2 in.	1/2 in.	300	28	188.70
7U	5/8 in.	5/8 in.	250	30	200.00
8U	1 in.	1 in.	200	35	222.60
10U	1 1/4 in.	1 1/4 in.	175	40	244.20

Type SI High Power Direct Current Drills

For 110 and 220 Volt—Variable Speed.



Type SI, 4SI

Actual service Tests have proved that these drills represent the highest achievement both electrically and mechanically in the development and construction of electric tools. These drills are built on the unit plan, consisting of five simple units. They can be easily disassembled without disturbing any electrical connections.

Type	Drills in Steel	Reams	Speed R.P.M.	Weight Lbs.	Price D.P.
2SI	1 in.	....	900	12	\$100.00
24SI	5/16 in.	....	800	14	110.00
3SI	3/8 in.	....	700	17	122.00
4SI	1/2 in.	....	450	24	144.30
5SI	5/8 in.	7/16 in.	400	26	155.40
6SI	1 in.	1 in.	300	28	166.50
7SI	1 1/8 in.	1 1/8 in.	250	30	188.70
8SI	1 1/2 in.	1 1/2 in.	200	35	200.00
10SI	1 3/4 in.	1 3/4 in.	175	40	210.90

Type SAL High Power Alternating Current Portable Drills

For 110-220 Volt, 60-Cycle Current.

This line of drills is exactly the same in appearance as the SI, but as the SI will operate on Direct Current only, the SAL will operate on Alternating Current only.

Type	Drills in Steel	Reams	Speed R.P.M.	Weight Lbs.	Price D.P.
2SAL	1 in.	....	700	12	\$104.50
24SAL	5/16 in.	....	600	14	111.00
3SAL	3/8 in.	....	500	17	121.00
4SAL	1/2 in.	....	400	24	155.40
5SAL	5/8 in.	7/16 in.	350	26	166.50
6SAL	1 in.	1 in.	300	28	183.70
7SAL	1 1/8 in.	1 1/8 in.	250	30	200.00

Electric Grinders

Type 3B, 6B, 2Ba, 3Ba for Bench Service



Bench Grinder Type 3B, 6B, 2Ba, 3Ba

This is one of the handiest tools ever placed in the garage. Can be placed on the bench at any desired point and is connected to a lamp socket. One end can be used for buffing, if so desired. These grinders are ball bearing, noiseless and very efficient.

Type B—For direct current only.

Type Ba—For alternating current only.

Type	Weight Lbs.	H.P.	Speed R.P.M.	Size of Wheel	Price D.P.
3B	30	1/4	4000	5x1	\$77.50
6B	50	1/2	2900	8x1	122.10
2Ba	30	1/4	3400	5x1	82.20
3Ba	40	1/4	3400	6x1	95.50

Tool Post Grinders

Type 3T, 6T, 2Ta, 3Ta

This Type Grinder is very useful in grinding work in the lathe and for center grinding. They fit into the tool post and, as will be noted by the cut, can be used for grinding the interiors of pieces that would otherwise be machined.

Type T—For direct current only.

Type Ta—For alternating current only.



Type 3T, 6T, 2Ta, 3Ta Tool Post Grinders

Type	Weight Lbs.	H.P.	Speed R.P.M.	Size of Wheel	Price D.P.
3T	24	1/4	4000	5x1	\$83.50
6T	42	1/2	2900	8x1	132.20
2Ta	24	1/4	3400	5x1	95.50
3Ta	30	1/4	3400	6x1	109.00

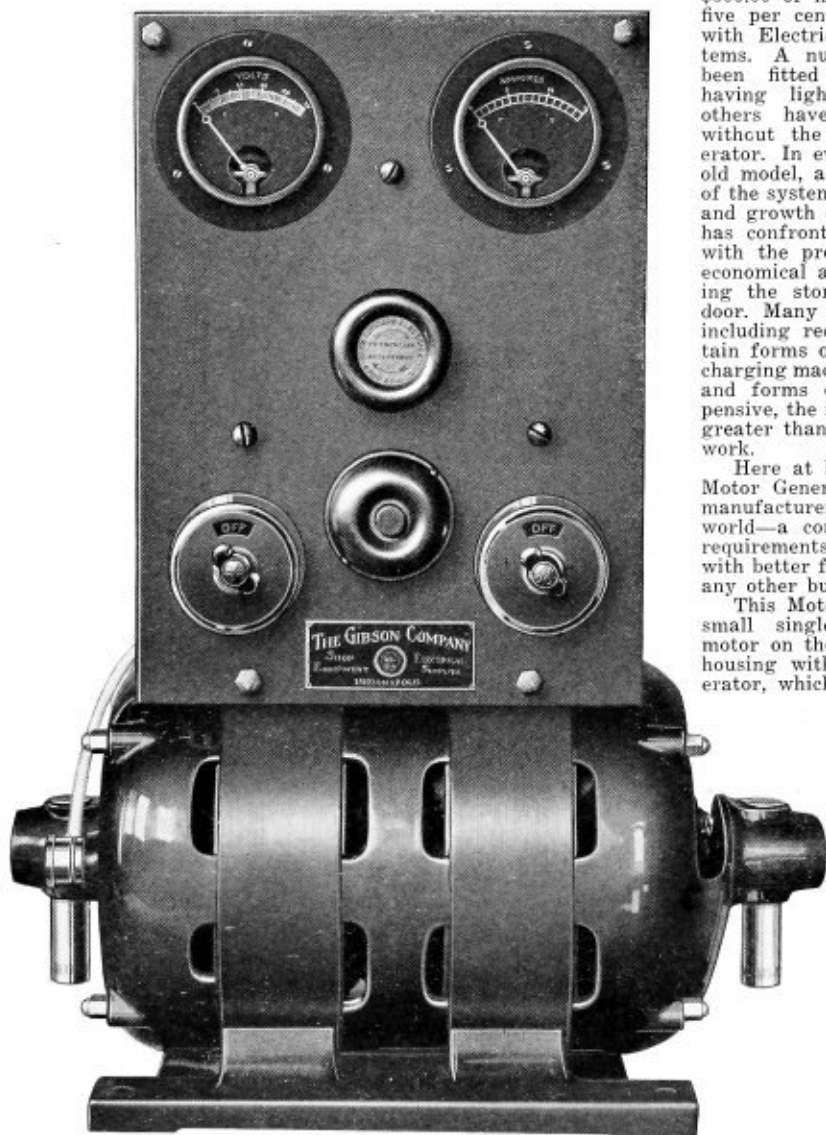
When ordering any of the tools shown on this page it is necessary that you give—Voltage. Whether direct or alternating current. Number of cycles. Whether single, two or three phase.



MOTOR GENERATOR SETS

For Charging, Lighting and Starting Storage Batteries

(Built by General Electric Company)



Seventy per cent. of all cars costing \$600.00 or more built in 1914, and ninety-five per cent. built in 1915, are equipped with Electric Lighting and Starting Systems. A number of earlier models have been fitted with these systems, some having lighting equipment only, while others have installed storage batteries without the addition of an electric generator. In every case, whether a recent or old model, a storage battery forms a part of the system. This "over-night" popularity and growth of the use of storage batteries has confronted the garage and repairman with the problem of finding a successful, economical and efficient means of recharging the storage batteries brought to his door. Many methods have been resorted to, including rectifiers, city current with certain forms of resistance, vibrating battery charging machines, etc.; all these appliances and forms of charging have proven expensive, the initial cost of the current being greater than the payment received for the work.

Here at last is the solution. This is a Motor Generator Set built by the largest manufacturer of electrical equipment in the world—a concern more familiar with the requirements of electrical apparatus and with better facilities for its production than any other builder of like equipment.

This Motor Generator Set consists of a small single phase alternating current motor on the same shaft and in the same housing with a small direct current generator, which produces current at the rate necessary to charge the storage batteries. Fixed to and a part of the set is a complete switchboard, having an ammeter, voltmeter, rheostat, and switches for reading and controlling the current flow from the generator.

In setting up this plant all that is necessary is to connect with a convenient lamp socket, with a plug provided for that purpose, then attach to your batteries, get the proper ampere and voltage reading, turn on your current and the battery or batteries commence charging.

This is one of the greatest money-making devices ever offered the garage and repairman. Every storage battery requires recharging occasionally, and this work is sure to come to your door. The usual charge for building up a 30 and 40 cents for a 3-cell

battery is from \$1.00 to \$1.50; with this machine the average cost is between 30 and 40 cents for a 3-cell 6-volt battery, where the current rate is less than eight cents per kilowatt hour.

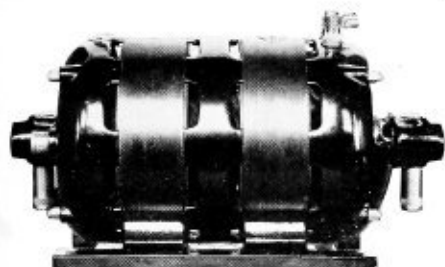
Where city current is direct instead of alternating these Motor Generator Sets are furnished with a direct current motor on the driving end.

BE THE FIRST IN YOUR TOWN TO INSTALL ONE OF THESE UNITS AND CONTROL THE BATTERY CHARGING BUSINESS

FALCON TIRES ARE SAFE TO BUY



MOTOR GENERATOR SETS



Built by General Electric Company

This cut shows the Motor Generator Set described on the opposite page, but without the switchboard. We have furnished large numbers of these units without the switchboard, some dealers preferring to rig up their own wiring and instruments. We can furnish the sets in either form—viz., with or without the switchboard.

This Motor Generator Set comes in several sizes, depending on the service in which it is employed. In some sections there is more battery charging than in others. This will naturally control the size of the unit purchased.

The most popular sizes are the 175-watt set, and the 250-watt set. To those not familiar with electrical terms, the following information will be of benefit:

Voltage represents pressure.

Ampere represents volume (quantity).

Watts represents power.

Voltage multiplied by ampere gives the watts.

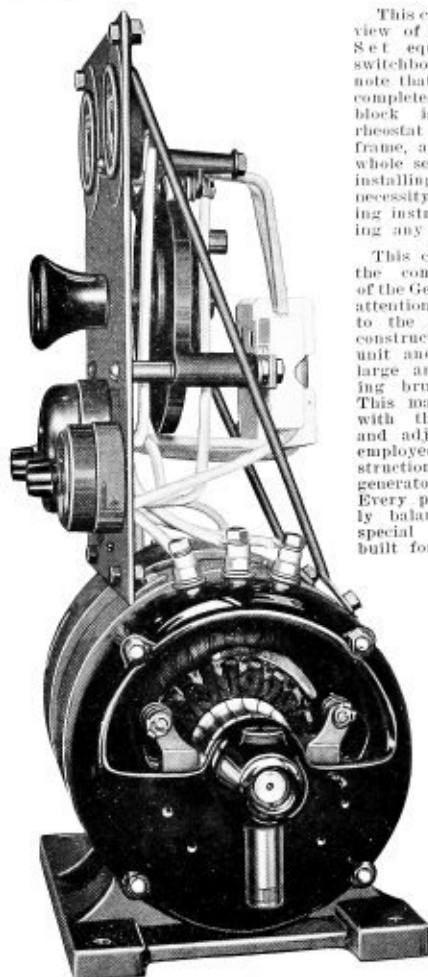
The 175-watt set is standard where the service is limited. It comes in the following combinations:

- 6 Volt, 30 Ampere**—With this equipment but one 6-volt battery can be charged. But the work is done very rapidly.
- 12 Volt, 15 Ampere**—With this set, two 6-volt or one 12-volt battery can be charged. It takes a trifle longer than the 6-volt size as the amperage is lower.
- 24 Volt, 7½ Ampere**—This is the most popular of all the sets we sell. With this equipment four 6-volt, or two 12-volt, or one 24-volt or two 6 and one 12-volt battery can be charged at the same time. When all the batteries are being charged to the capacity of this unit the approximate time to build up a battery, when the plates are in good condition and that battery is entirely exhausted—is about fourteen hours.

We recommend the 175-watt, 24-volt set for the use of the average garage, not having more than three or four batteries to charge at one time.

The 250-watt set is for larger places. It is of greater capacity than the 175-watt set and having greater ampere output, will do the work of charging much quicker. It comes in the following combinations:

- 12 Volt, 20 Ampere**—Will charge two 6 or one 12-volt battery and at a high charging rate, doing the work very rapidly.
- 24 Volt, 11 Ampere**—Will charge four 6-volt, or two 12-volt, or one 24-volt, or one 12 and two 6-volt batteries at the same time. This set is the most popular of the larger sets and considered standard by us for this size.



Built by General Electric Company

This cut shows a side view of the Generator Set equipped with switchboard. You will note that all wiring is complete, the fuse-block is fitted, the rheostat is fixed to the frame, and in fact the whole set is ready for installing without the necessity for purchasing instruments or doing any wiring.

This cut also shows the commutator side of the Generator. Your attention is directed to the very excellent construction of the unit and to the very large and self-adjusting brush holders. This machine is built with the same care and adjustment as is employed in the construction of the finest generators and motors. Every part is perfectly balanced, it is of special design and is built for this particular purpose and is not like numerous others offered—simply a make-shift or combination of a motor and generator—two separate units put together on a common base, and without consideration for the special demands which are made on equipment when used for charging storage batteries.

The bearings are of the self-oiling type, and as the machine is a self-contained unit, it will, with ordinary care, last a lifetime without repairs, other than an occasional renewal of the brushes. In fact your only expense is the first cost; after that your profits are constant.

This Motor Generator Set is without exception the most needed device in every garage and repair shop. The use of storage batteries is growing at such a remarkable rate that very few places are prepared to take care of their recharging. It is a mighty profitable business, and as the initial investment is a small one, considering the class of equipment, you should not hesitate, but send your order today.

Prices

175-Watt Set (any voltage) without switchboard.....	D.P.	\$128.75
175-Watt Set (any voltage) with switchboard.....	D.P.	177.60
250-Watt Set (any voltage) without switchboard.....	D.P.	211.00
250-Watt Set (any voltage) with switchboard.....	D.P.	260.00
Switchboard only.....	D.P.	55.50

CAN ALSO BE FURNISHED WITH DIRECT CURRENT MOTOR ON DRIVING END IN
110, 220 OR 550 VOLT AT SAME PRICES

A book of instructions is shipped with each set which gives full details covering operation, and the charging of batteries. When ordering, BE SURE TO SPECIFY the voltage of your city circuit—whether 110 or 220 volts; the frequency (number of cycles)—whether 25, 40 or 60.



MOTOR GENERATOR SETS

For Charging Electric Vehicle Storage Batteries

Manufactured by General Electric Company
For Public and Private Garage Use

The Motor Generator Sets described on this page are without exception the highest developed units of their type ever built. They are of various capacities and for that reason can be furnished for a garage of any size. They are built to General Electric Company's standards, which guarantees the purchaser the highest grade in electrical equipment.

These Motor Generator Sets consist of a Direct or Alternating Current Motor connected on the same shaft to a Direct Current Generator. It is practically a single unit, and as but one housing is used, the base forms a part of the equipment, and no sub-base is required. The Motor is connected to your city current and drives the Generator, thus producing direct current for charging the batteries.

The prices shown include field rheostat for reducing the generator voltage, with a range of from 125 volts (normal discharge) to 60 volts. It also includes a Starter for the Motor.

While we list only the 125-volt type, and recommend that size for Battery Charging, we can furnish other voltages on special order and at extra cost.

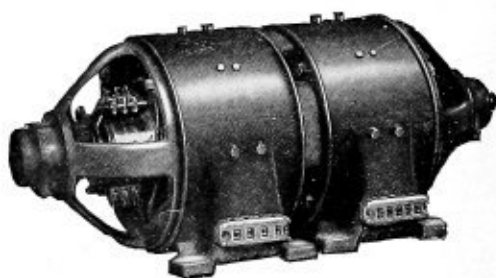
With Alternating Current Motor Type MIC



With Single Phase 60-Cycle Motor

KW	Size	HP	Motor Voltage	Amperes		Price
				At 60 V	At 125 V	
1		1.3	110 or 220	17	8	D.P. \$342.00
2		2.7	110 or 220	34	16	D.P. 482.00
3½		4.7	110 or 220	60	28	D.P. 578.00
5		6.7	110 or 220	85	40	D.P. 666.00
7		9.4	110 or 220	119	56	D.P. 840.00
10		13.4	110 or 220	170	80	D.P. 1,026.00
With Two or Three Phase 60-Cycle Motor						
1		1.3	For 110,	17	8	D.P. \$290.00
2		2.7	220, 440, or	34	16	D.P. 406.00
3½		4.7	550 Volts	60	28	D.P. 500.00
5		6.7		85	40	D.P. 622.00
7		9.4		119	56	D.P. 740.00
10		13.4		170	80	D.P. 931.00
14		18.7		234	112	D.P. 1,066.00
17½		23.4		292	140	D.P. 1,222.00

With Direct Current Motor Type MCC



KW	Size	HP	Motor Voltage	Amperes		Price
				At 60 V	At 125 V	
1		1.3	230	17	8	D.P. \$278.00
			550			D.P. 282.00
1½		1.7	230	21	10	D.P. 378.00
			550			D.P. 378.00
2		2.7	230	34	16	D.P. 467.00
			550			D.P. 473.00
3		4	230	50	24	D.P. 600.00
			550			D.P. 611.00
5		6.7	230	85	40	D.P. 722.00
			550			D.P. 744.00
6½		8.7	230	108	52	D.P. 1,011.00
			550			D.P. 1,033.00
9½		12.7	230	158	76	D.P. 1,210.00
			550			D.P. 1,233.00
13		17.4	230	217	104	D.P. 1,577.00
			550			D.P. 1,688.00

No instruments are included in the above prices. It is recommended that a voltmeter and ammeter be used in connection with these units. Please refer to that page describing "Switchboard Instruments" for prices on ammeters and voltmeters.

By determining the number of amperes per cell as used on the various vehicle batteries, the number of cells each unit will charge can be readily figured. As the rates on the different styles of batteries are not the same we do not list the number of cells these Motor Generator Sets will charge at one time.



ELECTRIC MOTORS

The use of electric power in the modern Garage and Machine Shop has created a demand for a high-class economical and efficient motor. We have been making a series of exhaustive tests that have extended over a period of fifteen months. In this test we used one or more of all the popular makes of motors. They have been used in connection with Air Compressors, Machine Tools, driving all kinds of shop equipment, etc., and the net result of our investigations has been that the product of the General Electric Company is superior in every way to any other motor on the market.

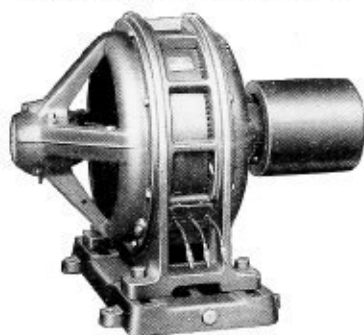
General Electric Motors will give the longest life, with the lowest current consumption per HP delivered, and will show the highest "day-in-day-out" efficiency. The General Electric Company is the recognized authority in the manufacture of electrical apparatus. Their motors are used in every industry on the civilized globe. They have built the largest units ever produced, and in competitive tests show that their motors have the most uniform starting torque, require fewer repairs, are heavier in construction and are better adapted to perform constant service at low operating cost than any other make of motor.

General Electric Motors are built in the largest and best equipped shops in America, designed by the world's foremost electrical engineers, and their success is justly due to a combination of correct design, excellence of material, superior shop facilities, conscientious workmanship, and, finally, most painstaking care in inspection and test.

We carry a complete stock of motors, in all sizes, and for every kind of current, in either constant or variable speed, with or without starting mechanism, arranged for either belt or direct drive and for any service you may indicate.

On this and the following page we describe and list the three most popular types, for regular Garage and Repair Shop service. In addition to the ones shown we can furnish units of any other size or type desired. Prices shown are invariably f. o. b. factory. No extra charge for boxing. We reserve the right to change the prices shown without notice.

Alternating Current Motors



In the majority of towns and cities Alternating Current is furnished by the power companies. It naturally follows that this type of motor is used to a greater extent than the direct current. Current is furnished in 25, 40, 50 and 60 cycles (frequency) and in voltages of 110, 220, 440 and 550—in some cases higher voltages are used, but these cases are rare. Another important feature in current of this kind is the number of phases employed, some cities have polyphase, a term used for two and three phase systems, while others furnish single phase.

We are in a position to furnish motors in any of the voltages specified, and in any number of phases or cycles.

We have selected and show the two most popular types of Alternating Current Motors, known as the Type RI Single Phase and Type K polyphase. These motors are the highest grade built and are guaranteed to give excellent service with small operating expense.

Direct Current Motors



The demand for this type of motor is confined to large cities and towns, and in isolated sections. Current is furnished in either 110, 220 or 550 volts. We offer the Type DSD as being the best adapted to service of this character. They can be furnished in either shunt or compound wound and can provide series-wound motors on special order.

One of the principal factors in the successful operation of Direct Current Motors is proper ventilation. Unless properly designed in this regard, over-heating and consequent loss of power will follow. The peculiar construction of the General Electric Company's Direct Current Motors prevent undue temperature rises, through special ventilating ducts and large air spaces. DSD and CVC Motors are furnished with ring oiling devices which guarantee uniform and ample lubrication. The Brush Holders are special automatic clock-spring type and self-conforming.



THE GIBSON COMPANY

INDIANAPOLIS

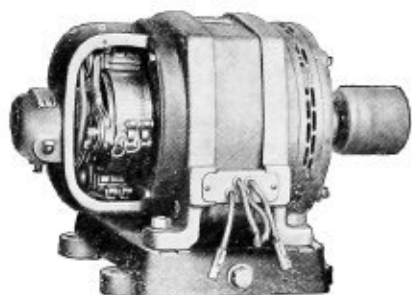


ELECTRIC MOTORS

To facilitate the correct filling of orders for Motors, the following directions for ordering should be carefully noted and followed:

- 1—Give type desired—horse power, speed (R.P.M.), voltage.
- 2—For alternating current circuit give frequency (number of cycles) and whether single, two or three phase, also voltage.
- 3—For direct current give type of winding, whether series, shunt or compound, also voltage.
- 4—Whether pulley, base and compensator (starter or rheostat) is to be included. If special pulley is desired, give diameter.
- 5—Always order by type, as Type DSD, Type K, etc.
- 6—If special proposition has been made you for motors in connection with other equipment, please refer to that letter, giving date.
- 7—Give full shipping instructions.
- 8—Indicate the service in which the motor is to be employed and whether for continuous or intermittent operation.

Alternating Current Motors



Type RL 60 Cycles
Single Phase—Constant Speed

This line of Single Phase Motors are the highest grade in design, construction and workmanship. Horse power ratings are based on the actual horse power delivered at the pulley when operated on a circuit corresponding with the figures shown on the name plate.

H.P.	Speed R.P.M.	Volts	Price Motor Only D.P.	Extra for Pulley D.P.	Extra for Base	Weight
1/4	1800	110-220	\$83.25	\$2.22	....	86
1/4	1200	110-220	102.00	2.22	....	105
1/2	1800	110-220	102.00	2.22	....	105
1/2	1200	110-220	135.50	2.22	\$6.66	172
3/4	1800	110-220	124.50	2.22	....	125
3/4	1200	110-220	157.00	2.22	6.66	185
1	1800	110-220	135.50	2.22	6.66	172
1	1200	110-220	160.00	2.22	6.66	196
2	1800	110-220	262.00	2.22	6.66	287
2	1200	110-220	186.50	2.22	6.66	196
3	1800	110-220	240.00	2.22	6.66	262
3	1200	110-220	344.50	2.22	8.88	382
5	1800	110-220	240.00	2.22	6.66	262
5	1200	110-220	302.00	2.22	8.88	367
7 1/2	1800	110-220	528.50	4.44	13.32	605
7 1/2	1200	110-220	302.00	2.22	8.88	367
10	1800	110-220	426.50	4.44	13.32	580
10	1200	110-220	577.20	4.44	15.54	690
15	1800	110-220	426.50	4.44	13.32	580
15	1200	110-220	500.00	4.44	15.54	660
15	900	110-220	755.00	4.44	15.54	868
20	1800	110-220	528.50	4.44	15.54	660
20	1200	110-220	606.00	4.44	15.54	830
20	900	110-220	943.50	4.44	15.54	1220
25	1800	110-220	684.00	4.44	15.54	830
25	1200	110-220	763.70	4.44	15.54	1140

Above prices do not include starter. Sizes up to and including 3/4 H.P. do not require starters. For starters on 1 H.P. motors add \$11.10 list. For starters on 2 and 3 H.P. motors add \$13.32 list. On 5 H.P. motors add \$15.54 list. On 7 1/2 H.P. add \$22.20 list. On 10 and 15 H.P. add \$42.20 list. Prices for higher voltages on application.

Prices for 25, 40 and 50 cycles on application.



Type K 60 Cycles
Two and Three Phase—Constant Speed

The Polyphase Induction Motor is considerably cheaper than the single phase; however, the two and three phase motors will operate only on two and three phase systems and cannot be driven by single phase current. The latter requires special and extra heavy windings which increase its cost. The two and three phase will be found just as efficient and of the same excellent design, material and workmanship as all other products of the General Electric Company.

H.P.	Speed R.P.M.	Volts	Price Motor Only D.P.	Extra for Pulley D.P.	Extra for Base	Weight
1/4	900	This type	\$86.60	\$2.22	\$6.66	100
1/4	1800	Motor is fur-	77.70	2.22	6.66	65
1/2	1200	nished in	86.60	2.22	6.66	100
1/2	1800	either 110, 220,	93.30	2.22	6.66	75
3/4	1200	440 or 550 volts	91.00	2.22	6.66	120
3/4	1800	at the same	113.50	2.22	6.66	100
1	1200	price	146.60	2.22	6.66	130
1	1800		102.20	2.22	6.66	130
1 1/2	1200		128.80	2.22	6.66	140
1 1/2	1800		168.80	2.22	6.66	220
2	900		113.50	2.22	6.66	140
2	1200		148.80	2.22	6.66	180
2	1800		184.30	2.22	6.66	220
3	900		128.80	2.22	6.66	180
3	1200		173.20	2.22	6.66	220
3	1800		215.40	2.22	8.88	340
5	900		151.00	2.22	6.66	220
5	1200		211.00	2.22	8.88	340
5	1800		271.00	4.44	13.32	440
7 1/2	900		384.00	4.44	11.10	700
7 1/2	1200		191.00	2.22	8.88	500
7 1/2	1800		320.00	4.44	11.10	800
10	900		240.00	4.44	13.32	600
10	1200		375.00	4.44	11.10	860
15	1800		337.50	4.44	11.10	610
15	900		466.20	6.66	13.32	1050

For starters for sizes from 1/4 to 10 H.P., inclusive, add \$86.58 list. For starters for 15 H.P. add \$91.02 list.

Prices for higher voltages on application.

Prices for 25, 40 and 50 cycle motors on application.

The sizes shown in the above lists are those usually required for the average garage and machine shop. We are in a position to furnish any style, size or type of motor: Vertical, back geared or totally enclosed, in units up to 6000 H.P., in any speed and for any voltage. If the speeds shown are not what you require, write our Engineering Department; they will gladly name you prices on any other unit in which you may be interested.



ELECTRIC MOTORS, SWITCHES, CUT-OUTS and FUSE BLOCKS

Direct Current Motors



Type DSD up to and including 1-HP

Type CVC from 1½ to 15-HP

Constant Speed—Shunt and Compound Wound—Continuous Service

The line of Direct Current Motors listed below is selected for their size and speed as being the best suited for the average garage and machine shop. They are the very highest grade and are rated very conservatively in power delivered.

HP	Speed RPM	Volts	Price Motor Only	Extra for Pulley	Extra for Base	Wt.
Type DSD—						
¼	1150	115	D.P. \$86.60	D.P. \$2.22	D.P. \$6.66	110
¼	1150	230	D.P. \$88.80	D.P. 2.22	D.P. 6.66	140
½	1700	115	D.P. 82.20	D.P. 2.22	D.P. 6.66	140
½	1700	230	D.P. 84.40	D.P. 2.22	D.P. 6.66	140
¾	1700	115	D.P. 91.00	D.P. 2.22	D.P. 6.66	163
¾	1700	230	D.P. 93.30	D.P. 2.22	D.P. 6.66	163
1	1475	115	D.P. 97.70	D.P. 2.22	D.P. 6.66	175
1	1475	230	D.P. 100.00	D.P. 2.22	D.P. 6.66	175
1	2000	115	D.P. 100.00	D.P. 2.22	D.P. 6.66	175
1	2000	230	D.P. 102.20	D.P. 2.22	D.P. 6.66	175
1	1070	115	D.P. 107.70	D.P. 2.22	D.P. 7.77	300
1	1700	230	D.P. 110.00	D.P. 2.22	D.P. 7.77	300
1	1150	115	D.P. 123.20	D.P. 2.22	D.P. 7.77	225
1	1150	230	D.P. 125.50	D.P. 2.22	D.P. 7.77	225
1	500	115	D.P. 191.00	D.P. 2.22	D.P. 8.88	390
1½	750	115	D.P. 191.00	D.P. 2.22	D.P. 8.88	390
1½	875	230	D.P. 191.00	D.P. 2.22	D.P. 8.88	390
2	1700	115	D.P. 134.40	D.P. 2.22	D.P. 7.77	225
2	1700	230	D.P. 136.60	D.P. 2.22	D.P. 7.77	225
Type CVC—						
2	1250	115	D.P. 195.40	D.P. 2.22	D.P. 8.88	395
2	1250	230	D.P. 195.40	D.P. 2.22	D.P. 8.88	395
3	1650	115	D.P. 191.00	D.P. 2.22	D.P. 8.88	400
3	1650	230	D.P. 191.00	D.P. 2.22	D.P. 8.88	400
3	1250	115	D.P. 240.00	D.P. 2.22	D.P. 11.10	540
3	1250	230	D.P. 240.00	D.P. 2.22	D.P. 11.10	540
3	1000	115	D.P. 246.50	D.P. 2.22	D.P. 11.10	540
3	1000	230	D.P. 246.50	D.P. 2.22	D.P. 11.10	540
5	1650	115	D.P. 233.10	D.P. 2.22	D.P. 11.10	540
5	1650	230	D.P. 233.10	D.P. 2.22	D.P. 11.10	540
5	1250	115	D.P. 288.60	D.P. 2.22	D.P. 11.10	720
5	1250	230	D.P. 290.80	D.P. 2.22	D.P. 11.10	720
5	1100	115	D.P. 282.00	D.P. 2.22	D.P. 11.10	720
5	1100	230	D.P. 284.20	D.P. 2.22	D.P. 11.10	720
7½	1525	115	D.P. 284.20	D.P. 2.22	D.P. 11.10	800
7½	1525	230	D.P. 290.80	D.P. 2.22	D.P. 11.10	820
7½	950	115	D.P. 421.80	D.P. 4.44	D.P. 15.54	1060
7½	950	230	D.P. 428.50	D.P. 4.44	D.P. 15.54	1090
10	1250	115	D.P. 417.10	D.P. 4.44	D.P. 15.54	1070
10	1250	230	D.P. 426.30	D.P. 4.44	D.P. 15.54	1095
10	700	115	D.P. 490.60	D.P. 6.66	D.P. 17.76	1370
10	700	230	D.P. 499.50	D.P. 6.66	D.P. 17.76	1410
15	925	115	D.P. 492.90	D.P. 6.66	D.P. 17.76	1430
15	925	230	D.P. 504.00	D.P. 6.66	D.P. 17.76	1480
15	700	115	D.P. 657.20	D.P. 8.88	D.P. 17.76	1850
15	700	230	D.P. 668.30	D.P. 8.88	D.P. 17.76	1910

The above prices do not include rheostats. These can be furnished for the sizes indicated at the following prices:

¼-HP	D.P. \$6.66
½ to 3-HP inclusive	D.P. 8.88
5-HP	D.P. 15.54
7½-HP	D.P. 24.42
10-HP	D.P. 28.86
15-HP	D.P. 37.74

We have listed Direct Current Motors for 115 and 230-volt exclusively, although we can furnish them in any voltage and speed. Those shown are standard and carried in stock. The speeds have been selected as being the best adaptable for regular garage and machine shop service.

The motors listed are for service on 110 and 220-volt circuits. If we do not show what you require send us your specifications. We can name you satisfactory prices.

We carry a line of Switches, Cut-outs, Fuse Blocks and Fuses, selected for their adaptability to garage wiring. In addition to those listed we can furnish any size, type or capacity switch desired.



Double Pole Single Throw—

No. Amps.	D.P.	D.P.
3001 30	D.P. \$2.88	
3002 60	D.P. 4.20	
3004 100	D.P. 8.00	
3006 200	D.P. 12.20	
3008 300	D.P. 18.80	
3009 400	D.P. 28.80	
3811 600	D.P. 41.00	

For 250 Volts D.C. or 500 Volts A.C.

Double Pole Single Throw, with N.E.C. Fuse Connections—

No. Amps.	D.P.	D.P.
1130 30	D.P. \$2.35	
1131 60	D.P. 4.00	
1133 100	D.P. 8.10	
1134 200	D.P. 15.00	

Single Pole Single

Throw—

No. Amps.	D.P.	D.P.
1120 30	D.P. \$1.55	
1121 60	D.P. 2.62	
1123 100	D.P. 5.30	
1124 200	D.P. 9.80	

For 250 Volts D.C. or 500 Volts A.C.

Kappa Switches in single, two and three poles, for lines carrying 30 amperes and less. These are suitable for charging systems.



For 250 Volts

Without Fuse Connections—

No. Poles	Amps.	D.P.
20 1	30	D.P. \$1.10
22 2	30	D.P. 1.55
23 3	30	D.P. 2.45

With Fuse Connections—

No. Poles	Amps.	D.P.
24 1	30	D.P. \$1.55
25 2	30	D.P. 2.44
26 2	30	D.P. 3.55

Edison Plug Cut-Outs and Fuses

We can furnish all sizes and types of Edison Plug Cut-outs and Fuses.

No. 2569 Single Pole Main	D.P. \$0.44
No. 2965 Double Pole Main	D.P. .71
No. 2165 Triple Pole Main	D.P. 1.04
No. 1935 Double Pole 1 Branch	D.P. .78
No. 8042 Triple Pole 1 Branch	D.P. 1.34
No. 2587 Double Pole 2 Branch	D.P. 1.56
No. 2150 3 to 2 Wire 1 Branch	D.P. 1.06
No. 2189 3 to 2 Wire 2 Branch	D.P. 1.66
No. 2135 Triple Pole 2 Branch	D.P. 2.34

8020 Double Pole 1 or 2 Crossover Branch D.P. 1.10

Fuse Plugs



3 Amp	D.P. \$0.11	15 Amp	D.P. \$0.11
6 Amp	D.P. .11	20 Amp	D.P. .11
10 Amp	D.P. .11	25 Amp	D.P. .11
12 Amp	D.P. .11	30 Amp	D.P. .11

Union Enclosed Fuse Blocks

30 Amp. Single Pole Main Line	D.P. \$1.12
30 Amp. Double Pole Main Line	D.P. 1.45
30 Amp. Triple Pole Main Line	D.P. 2.00
30 Amp. Double Pole 1 Branch	D.P. 1.78
30 Amp. Double Pole 2 Branch	D.P. 3.22
60 Amp. Single Pole Main Line	D.P. 1.78
60 Amp. Double Pole Main Line	D.P. 3.44
60 Amp. Triple Pole Main Line	D.P. 4.88
60 Amp. Double Pole 1 Branch	D.P. 4.32
60 Amp. Double Pole 2 Branch	D.P. 8.20

We can furnish these blocks in any size for any combination.

Union Non-Arcing Enclosed Fuses

250 Volts	
From 3 to 30 Amps. inclusive	D.P. \$0.60
From 35 to 60 Amps. inclusive	D.P. .88





SWITCHBOARD INSTRUMENTS

Voltsmeters and Ammeters

We show on this page a line of voltmeters and ammeters for switchboard service, or for use where it is necessary to measure the volume of current passing through the lines. For the benefit of those not familiar with electrical terms: Volts means pressure or speed at which the current is flowing. Amperes means volume or quantity of current consumed.

The line of instruments shown are built on the famous D'Arsonval principle, which time and experience has proven the best. The development of this line of meters has been governed by the experience of thousands of users and the requirements in this service. A permanent magnet of circular form is used in all these instruments, this being the best form to prevent leakage of the magnetic flux. Only the best Tungsten steel adaptable for the purpose, properly treated and aged, is used.

The entire moving system is mounted pivotally between two sapphire bearings, highly polished. This takes care of climatic changes.

The essential characteristics of these instruments are:

The very small number of parts.

The parts are designed in a simple and substantial manner. There is an entire absence of complication of parts which might cause the instrument to get out of order or become erratic.

These instruments are the most accurate manufactured and are at the same time the lowest in price.

Switchboard Instruments

Ammeter—Model No. 50
Voltmeter—Model No. 51



Size.....3½ inches diameter
Scale length.....2 inches
Maximum scale divisions.....50

This shows the smallest size switchboard instrument.

Recommended for small switchboards, for storage battery use and charging boards.

Ammeters Model No. 50			Voltsmeters Model No. 51		
Cat. No.	Amp. Range	Price	Cat. No.	Volt. Range	Price
50-10	0-10	D.P. \$15.00	51-10	0-10	D.P. \$14.60
50-25	0-25	D.P. 16.00	51-30	0-30	D.P. 15.60
50-50	0-50	D.P. 17.00	51-75	0-75	D.P. 16.50
50-100	0-100	D.P. 19.80	51-120	0-120	D.P. 18.90

Can also be furnished in 0-150, 0-200, 0-250

Can also be furnished in 0-150 and 0-300.

Standard finish dead black enamel. In nickel, brass, copper or gun metal to order—no extra charge.

Switchboard Instruments

Ammeter—Model No. 56
Voltmeter—Model No. 57



Size 7¼ inches Diameter Scale Length 5 inches
Maximum Scale Divisions 150

This shows the largest switchboard instrument we carry. It is used in motor service, or in connection with panels used for charging vehicle batteries.

Ammeters Model No. 56			Voltmeter Model No. 57		
Cat. No.	Amp. Range	Price	Cat. No.	Volt. Range	Price
56-50	0-50	D.P. \$26.40	57-50	0-50	D.P. \$25.50
56-100	0-100	D.P. 29.30	57-120	0-120	D.P. 26.40
56-150	0-150	D.P. 30.20	57-250	0-250	D.P. 29.30
56-250	0-250	D.P. 32.00	57-600	0-600	D.P. 32.00

Can be furnished for any range from 0-5 up to 0-1000 and in any division between.

Can be furnished for any range from 0-3 up to 0-750 and in any division between.

Standard finish dead black enamel. Raised parts polished nickel. All nickel, brass or gun metal finish to order—no extra charge.

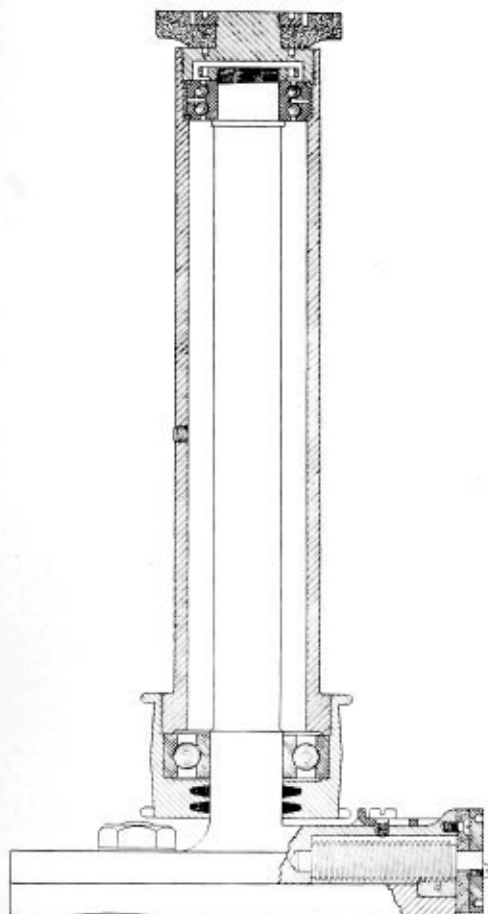
While we show only direct current instruments on this page, we can furnish alternating current instruments for any amperage or voltage, and in any scale you may desire.

When ordering be sure to specify whether direct or alternating current is used. Give the catalogue number and the finish desired.



CYLINDER GRINDER AND MOTOR STANDS

The Acme Cylinder Grinder



Every garage has occasion to grind automobile engine cylinders, but up to this time no satisfactory method has been found, without the installation of very heavy and expensive machinery.

The Acme Cylinder Grinder has been designed especially for grinding multiple automobile engine cylinders that cannot be rotated conveniently on an engine lathe of average swing.

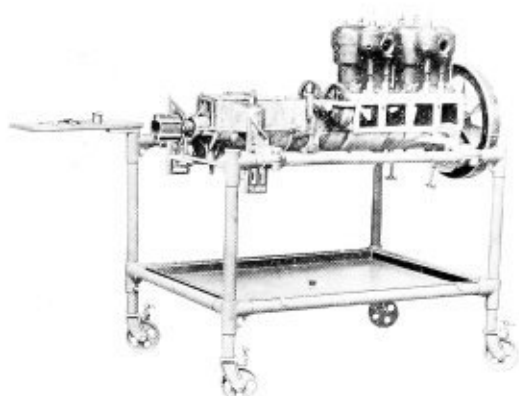
In combination with the lathe it possesses all the features of the high priced manufacturing grinder, such as longitudinal and vertical adjustment of the work, variable speeds for rotation of the head, variable feeds for table travel, convenient arrangement for feeding the work to the wheel and micrometer readings for close adjustment. The travel of the lathe carriage feeds the work to the wheel, and the travel is regulated by feed gears at headstock end of lathe. On the carriage of the lathe is mounted a flat plate in a vertical position to which the crank end of the cylinders is bolted. This plate has a vertical and cross-wise adjustment, which permits of readily centering the hole to be ground.

A countershaft with pulleys of proper dimensions to give the best cutting speed is furnished as part of the regular equipment. The cut shows the detail construction.

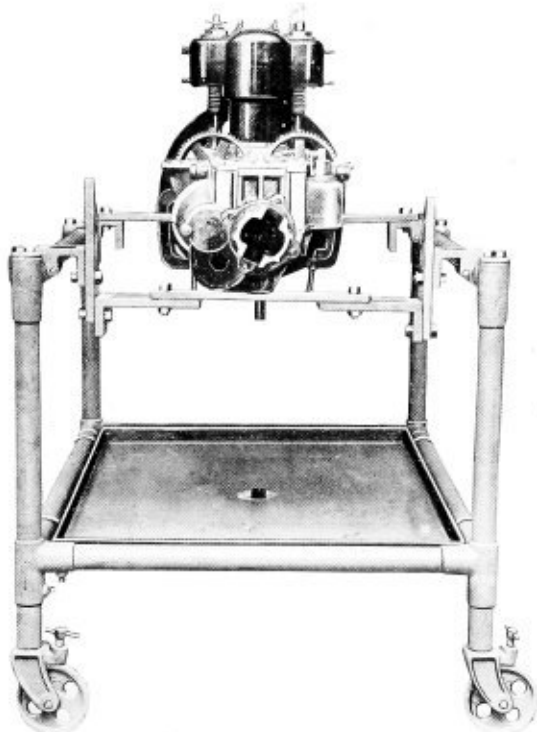
Each.....D.P. \$222.00

This includes counter shaft, six grinding wheels and diamond wheel dresser.

The Universal Motor Stand



This represents one of the most needed appliances in the garage and repair shop. It was invented by a practical repair man and is a device that will reduce labor and expedite the work of motor repair and assembling to a wonderful extent.



It will accommodate any size motor, two, four, six or eight cylinder. By aid of the adjustable corner plates, the motor can be placed at any angle. It has a large pan on which tools can be placed. The casters are large and by their use the stand can be moved about the garage at will. These casters can be locked at will and the stand is made immovable. Is heavily constructed of seamless steel tubing and is very rigid.

This Universal Motor Stand will pay its first cost in a short time. It is convenient for displaying motors when used in sales rooms for exhibition purposes.

Price.....D.P. \$53.30

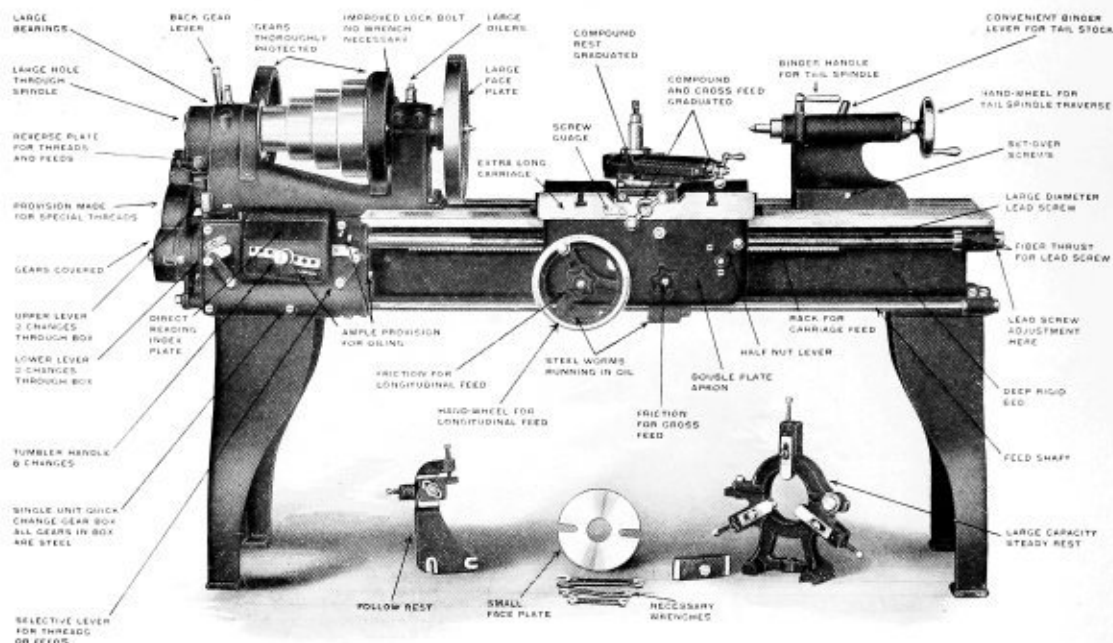


THE GIBSON COMPANY

INDIANAPOLIS



MACHINE TOOLS—LATHES



Manufacturers of Machine Tools have recognized the necessity for producing a Lathe for Garage and Repair Service, with the result that within the past few years a large number of tools of this type have been offered the trade for this class of work. Some of these machines are simply "worked over" models that have been made to answer the varying need of the Automobile Repair Shop. In very few cases have the tools been designed for handling the different kinds of work usual to the Garage, and the result has been that the Garage Man has been compelled to take that which has been offered him.

We have been handling Machine Tools for several years, and have had an opportunity to determine the requirements of the Automobile Garage and Repair Shop. We are familiar with the class of work they have to perform, and with this knowledge at hand, we had our engineers inspect the many types of machines manufactured for this trade. We found that the product of the Rockford Lathe and Drill Company came nearer meeting the variable demands of the Automobile Garage and Repair Shop than any other tool offered for this purpose.

These Lathes are manufactured by Lathe specialists. They are designed and built along the most modern engineering lines. Their construction meets the rigid requirements of the public garage and machine shop. A careful reference to the specifications recited below will convince you of their adaptability to your business. The raw materials are selected from the best, and these materials are all subjected to a chemical and physical analysis, and nothing enters into the construction of these machines that does not show an exceptionally high tensile strength. Workmanship is of the highest character. Assembling is done by experts, and the finished product is subjected to a series of tests that would ruin most tools of the same size and type.

Your attention is directed to the extreme ruggedness of all parts; most machine tool builders slight their product by cutting down on materials, which weakens the entire structure and shortens the life of the tools. The Rockford line is extra heavy construction throughout, but the weight is so well apportioned and distributed that the most delicate work can be accomplished. The machines are neat in appearance and the finish is the finest ever placed on any line of lathes.

We recommend the Rockford Lathes for Garage and Automobile Repair Service as being the highest grade possible to construct. Every tool is guaranteed covering operation, material and workmanship. This guarantee of the manufacturer is supplemented by our Guarantee as their Distributor.

Specifications

Beds—Are of deep section with wide cross braces which together with proper distribution of metal eliminates all vibration under the varying duty for which these lathes are designed. Carriages are drilled so that taper attachment can be applied at any time.

Headstock—Are massive and firmly bolted to the beds. Bearings are exceptionally large, of a special composition metal, are carefully machined and hand scraped to fit spindle. Spindle is of high carbon steel, accurately ground and carefully tested for flaws.

Tailstock—Is well proportioned and of the off-set type which allows the compound rest to set parallel to the bed, and is provided with set-over for turning tapers. The improved method of clamping insures the tailstock being kept in position without slipping.

Carriage—Is especially heavy with extra wide bridge which permits a heavy cut without chatter. Has an extremely long bearing and is provided with self-oiling felt wipers. The thread-cutting indicator which can be disengaged when not in use enables the operator to catch any pitch of thread without reversing the lathe, permitting both countershaft belts to run forward, giving 18 spindle speeds.

Apron—Apron is of heavy design, with double bearing for all shafts, which is a very essential feature for a variable duty lathe. All gears are of wide face and coarse pitch, and being of high grade alloy steel, withstand the constant strain without breakage and with the least wear. All feeds are reversed in apron and interlock with lead screw nut, making it impossible to engage feeds and lead screw at the same time.

Gear Box—When furnished as standard (without the quick-change mechanism) three quick changes of feed are obtained for each change of gearing through Sliding Steel Gears and Hardened Steel Clutches which give a powerful drive and an unlimited range of feed for all classes of work—a wonderful improvement over belt-driven feeds. This gear box simplifies thread cutting, all pitches being obtained without the troublesome compounding of gears which has always been the greatest disadvantage of belt-driven hand change gear lathes. Remember this style gear box is standard equipment—No extra charge.

Quick Change Gear Mechanism—These lathes can also be furnished with a quick change Gear Mechanism as shown on the opposite page. This is one of the simplest quick change mechanisms ever devised. All gears are of wide face, of coarse pitch, cut from solid steel (not cast). Index plate gives forty standard changes of feeds and threads, obtained through sliding steel gears and hardened steel clutches controlled by two large convenient handles in connection with tumbler. Lead screw and feed shaft operate independently, either being engaged by lever on front of box.

Countershaft—Double friction self-oiling countershaft furnished with all lathes.

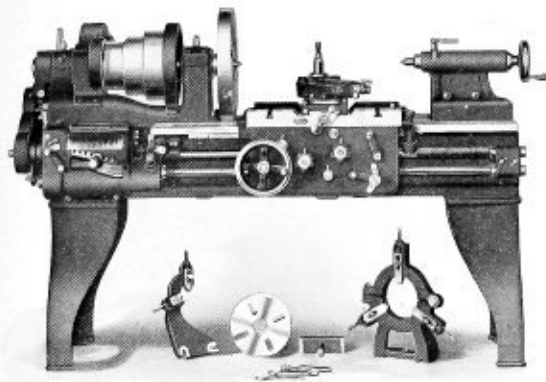
Regular Equipment—Includes steady and follow rests, large and small face plates, wrenches and countershaft.

F-i-n-a-l-l-y—Buy a Rockford and be assured that you have the best lathe built for your work. They give double service.



MACHINE TOOLS

Lathes



17-in. x 6-ft. Double Back Geared Engine Lathe Equipped with Quick Change Mechanism

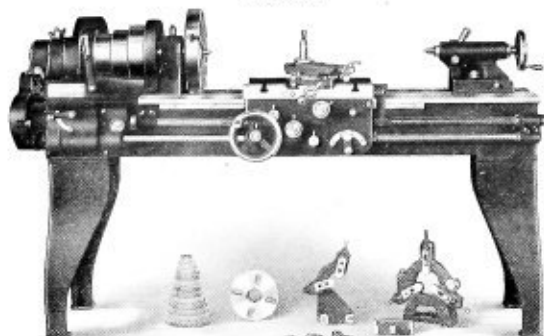
This is the best heavy duty lathe manufactured; it has every desirable feature known to tools of this class. Every detail in design has been carefully considered, and there is no other lathe of this size built that will do the work that can be handled on this machine. Please note the specifications given below; the heavy bearings; the extra large piece it will swing; a 38-inch automobile wheel can be chucked on this tool; for particular specifications covering details of construction and design refer to the opposite page. This tool is the masterpiece of the lathe builder. It is particularly recommended to the garage or repair shop desiring a high grade dependable tool capable of taking care of any work that may come into their shop.

Cut shows machine equipped with quick change mechanism. Can also be furnished with regular gear change mechanism.

Lathe Dimensions and Prices

Standard Lathe with Compound Rest.....	D.P. \$ 967.00
Lathe with Quick Change Gears.....	D.P. 1,090.00
Extra 2 ft. add. length of Bed.....	D.P. 55.50
Taper Attachment.....	D.P. 133.20
Draw-in Attachment with one Collet.....	D.P. 82.00
Extra for each Collet.....	D.P. 8.90
Turret on Carriage.....	D.P. 177.60
Turret on Shears.....	D.P. 396.50
Power Feed to Turret on Shears.....	D.P. 133.20
Fitting Chuck and Plate.....	D.P. 11.10
Swings over Ways.....	13 1/2 inches
Swings over Carriage.....	11 1/2 inches
Distance between Centers 6-ft. Bed.....	28 inches
Size of Front Bearing.....	2 3/4 x 5 inches
Size of Back Bearing.....	2 3/4 x 4 inches
Diameter of Hole in Spindle.....	1 1/2 inches
Centers conform to Morse Taper.....	No. 4
Diameter of Nose of Spindle.....	2 1/2 inches
Number of Threads on Spindle.....	6 per inch
Diameter of largest step, Cone Pulley.....	10 1/2 inches
Diameter of smallest step, Cone Pulley.....	7 1/4 inches
Width of Belt on Cones.....	3 inches
Number of Steps on Cone Pulley.....	11 1/2 to 1
Ratio of Single Back Gears.....	3.50 to 1
Ratio of Double Back Gears.....	1 1/4 inches
Diameter of Lead Screw.....	1 1/4 inches
Threads on Lead Screw.....	6 per inch
Threads, will cut per inch, Standard.....	2 to 96
Threads, will cut per inch, Quick Change.....	3 to 92
Diameter of Tail Stock Spindle.....	2 1/4 inches
Length of Carriage.....	26 1/4 inches
Size of Cutting Tools.....	7 1/2 x 1 1/4 inches
Size of Friction Pulleys on Countershaft.....	10 x 3 1/4 inches
Speed of Countershaft.....	225 and 275
Net Weight, 6-ft. Bed.....	Ap. 2450 lbs.
Shipping Weight.....	Ap. 2650 lbs.
Weight, extra 2 ft. of Bed.....	275 lbs.

Lathes



"Economy" 13-in. x 6-ft. and 14-in. x 6-ft. Double Back Geared Engine Lathe with Standard Gear Box

This lathe is especially designed to meet the modern demand for a small heavy duty machine of sufficient weight and power to handle all work of small and medium character, and to do precision machining. Being very high grade and extremely accurate, it is particularly adaptable to the tool room, garage and repair shop.

The argument is sometimes advanced by purchasers buying machine tools that a certain machine, although it is not of the highest quality, still is good enough for their work. This is a mistake! There is no machine work which is produced for profit that can be economically done on an inferior machine. Machine tools are not purchased every day, and the prospective purchaser should bear in mind that while a machine might do good work while new, what he must have and should insist on is continuous service for many years and absolute accuracy without constant lathe repairs for a period commensurate with the investment.

Lathe Dimensions and Prices

	13-in. x 6-ft.	14-in. x 6-ft.
Standard Lathe with Compound Rest.....	D.P. \$644.00	D.P. \$732.00
Lathe with Quick Change Gears.....	D.P. 730.00	D.P. 815.00
Extra 2 ft. add. length of Bed.....	D.P. 51.10	D.P. 55.50
Taper Attachment.....	D.P. 122.20	D.P. 122.20
Draw-in Attachment with one Collet.....	D.P. 77.70	D.P. 77.70
Extra for each Collet.....	D.P. 8.88	D.P. 8.88
Turret on Carriage.....	D.P. 133.20	D.P. 133.20
Turret on Shears.....	D.P. 234.00	D.P. 234.00
Power Feed to Turret on Shears.....	D.P. 111.00	D.P. 111.00
Fitting Chuck and Plate.....	D.P. 11.10	D.P. 11.10
Swings over Ways.....	14 1/2 in.	16 1/2 in.
Swings over Carriage.....	8 in.	9 3/4 in.
Distance between Centers 6-ft. Bed.....	37 in.	36 in.
Size of Front Bearing.....	2 3/4 x 4 in.	2 1/2 x 4 in.
Size of Back Bearing.....	1 1/2 x 3 in.	2 1/2 x 3 in.
Diameter of Hole in Spindle.....	1 1/2 in.	1 1/2 in.
Centers Conform to Morse Taper.....	No. 3	No. 3
Diameter of Nose of Spindle.....	2 1/2 in.	2 1/2 in.
Number of Threads on Spindle.....	6 per in.	6 per in.
Diam. of largest step, Cone Pulley.....	8 1/2 in.	9 1/2 in.
Diam. of smallest step, Cone Pulley.....	6 in.	4 1/2 in.
Width of Belt on Cones.....	2 1/2 in.	2 1/2 in.
Number of Steps on Cone Pulley.....	3	4
Ratio of Single Back Gears.....	9.07 to 1	7 1/2 to 1
Ratio of Double Back Gears.....	3.42 to 1	—
Diameter of Lead Screw.....	1 1/4 in.	1 1/4 in.
Threads on Lead Screw.....	6 per in.	6 per in.
Threads, will cut per inch, Standard.....	4 to 46	3 to 96
Feeds for each gear change, Standard.....	3	3
Threads will cut per inch, Quick Change.....	4 to 56	3 to 92
Diameter of Tail Stock Spindle.....	1 3/4 in.	1 3/4 in.
Length of Carriage.....	19 3/4 in.	22 in.
Size of Cutting Tools.....	1 1/2 x 1 in.	1 1/2 x 1 1/4 in.
Size of Friction Pulleys on Countershaft.....	10 x 3 1/4 in.	12 x 4 in.
Speed of Countershaft.....	225 and 275	150 and 200
Net Weight, 6-ft. Bed.....	1425 lbs.	1700 lbs.
Shipping Weight.....	Ap. 1600 lbs.	Ap. 1850 lbs.
Weight, extra 2 ft. of Bed.....	Ap. 180 lbs.	240 lbs.



MACHINE TOOLS

17-Inch Stationary Head Drill Press



Every garage and repair shop has constant need for an efficient, sturdy drill press; one on which precision or heavy drilling can be performed. The 17-Inch Stationary Head Drill illustrated here has been designed to meet this long felt want. It is a strong and plain type of drill of liberal dimensions and generous capacity. All unnecessary devices frequently found in machines of greater range, but no greater capacity, have been eliminated, making this drill especially well adapted for quick and accurate work usual to garages and repair shops. It is particularly adapted to high speed work.

The column is very massive and closely fitted to the oil pan base. The top and bottom cones are large. Bevel driven gears are planed by a special process, and the spindle is of high carbon steel forged and ground, and has ball-bearing thrust. The spindle bearings are unusually broad, also the column bearing for table support. Can also be furnished with combined wheel and lever feed.

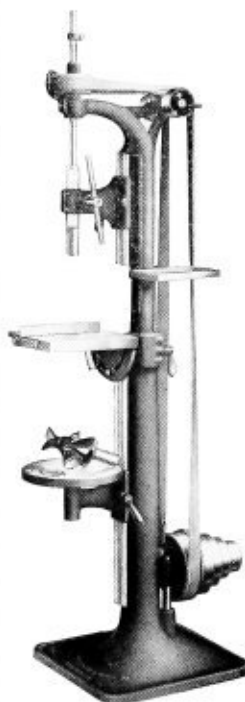
This excellent drill is the product of the Rockford Lathe and Drill Company and has the same excellent workmanship, material and design that are incorporated in the lathes described on the preceding pages of this book.

Buy a "ROCKFORD" and be satisfied.

Drill Dimensions and Prices, No. 325.

Price of machine.....	D.P.	\$133.20
Number of spindles.....	1	
Swing.....	17 inches	
Distance from column to center of spindle.....	8½ inches	
Maximum distance, spindle to table.....	26 inches	
Diameter of column.....	5 inches	
Size of square or round table, diameter.....	15 inches	
Vertical adjustment of head.....	9 inches	
Vertical travel of spindle.....	7½ inches	
Diameter of spindle.....	1½ inches	
Diameter of sleeve.....	2 inches	
Hole in spindle, Morse taper.....	3 inches	
Diameter of large step on cone.....	9 inches	
Diameter of small step on cone.....	4 inches	
Width of belt on cone pulleys.....	2 inches	
Size of tight and loose pulleys.....	9x2½ inches	
Speed of tight and loose pulleys.....	300	
Capacity of machine.....	1 inch	
Net weight, pounds.....	500	
Shipping weight, pounds.....	600	

No. 205 Sensitive Drill



This is an excellent little tool for small work. It can be used for drilling the ends of very long pieces, such as axles, propeller shafts, engine shafts, etc. It is sturdily built and has every convenience demanded in a tool of this type.

This drill is equipped with a square or upper table which swings around the column and can be tilted to any desired angle, while the round or lower table is adjustable vertically and fitted with a new and convenient centering device, a combination of three centers in one. The square table also has bracket or gauge for angular drilling, and is provided with stop pin and locking bolt.

The spindle is of high carbon steel, forged and ground, with ball-bearing thrust and is balanced by weight and chain.

Driving cone has four steps of liberal size, and the lower cone is provided with vertical adjustment to take up slackness of belt.

Stop collar at top of spindle will be found very convenient for duplicate work, or for drilling to fixed depths.

A separate countershaft is furnished with each machine, but no belt.

This is another of the excellent "ROCKFORD" products, and a tool worthy of any shop.

Drill Dimensions and Prices, No. 205

Price of machine.....	D.P.	\$133.20
Number of spindles.....	1	
Swing.....	14 inches	
Distance from column to center of spindle.....	7 inches	
Maximum distance, spindle to table.....	42 inches	
Size of square or round table.....	11x11 inches	
Vertical adjustment of head.....	9 inches	
Vertical travel of spindle.....	5½ inches	
Diameter of spindle.....	3 inches	
Diameter of sleeve.....	1½ inches	
Hole in spindle, Morse taper.....	2 inches	
Diameter of large step on cone.....	5½ inches	
Diameter of small step on cone.....	4½ inches	
Width of belt on cone pulley.....	1½ inches	
Size of tight and loose pulleys.....	8x2½ inches	
Speed of tight and loose pulleys.....	450	
Capacity of machine.....	½ inch	
Net weight, pounds.....	375	
Shipping weight, pounds.....	395	



MACHINE TOOLS

Lathe Milling Attachment

Motor Driven

This is the first Practical Milling Attachment ever devised. It can be attached to any lathe, and will do the various classes of work that can be done on a regular milling machine costing anywhere from \$300 to \$700. This attachment is simple, rigid, powerful and accurate.

By using the standard types of cutters com-

monly used on regular Milling Machines all classes of work can be performed, such as—

Woodruff Key-Seats.

Key-Ways.

Surface Milling.

End Milling.

Sawing.

Slotting.

Gear Cutting (when special index is attached).

The machine fits into the tool slide of the lathe, and requires no change of bed or apron.

Note in the illustration the heavy round column on which the sliding arm is carried. This arm is provided with vertical adjustment, thus raising or lowering the cutter, according to the work to be done.

The vertical screw connected with the arm permits micrometer adjustment. Cross and longitudinal adjustment is taken care of by the carriage and cross-feed movement of the lathe and consequently inaccurate work is impossible.

This machine is regularly furnished with a 1/2 H. P. Motor, which with the ratio of gearing through worm and worm wheel of 72 to 1 gives ample power for all average work. Motor is attached to any lamp socket by cord and is then ready to operate. We can furnish motors of any current, and have in stock milling attachments fitted with A.C. and D.C. motors of 110 and 220 volts.

In ordering BE SURE TO SPECIFY KIND OF CURRENT USED AND VOLTAGE.

This entire machine is fitted with ball bearings.

Complete with Motor, eachD.P. \$222.00

Hercules General Utility Milling Machine

This Milling Machine while inexpensive will do the work of the highest-priced miller. For years the garage men and repairmen have felt the need of a machine for doing a line of general milling machine work, but the high price of the standard machines has prohibited their purchase. Every large repair shop and garage can use a Hercules Milling Machine to advantage. Many jobs now being sent outside or done in a laborious and unsatisfactory manner can be done quickly and economically with this tool. The Hercules is the most efficient and productive small milling machine made.

All parts are machined in jigs.

All gears are housed.

No counter-shaft necessary. Direct drive from shaft or motor.

Longitudinal travel of table, 6 inches.

This machine is adapted for:
Internal and external key-way cutting.
Slotting engine connecting rods.
Commutator slotting.

Squaring up shafts.

Tube slotting.

Castellating nuts.

Surface milling and end milling.

Gear cutting (with special attachment).

The efficiency of the Hercules Milling Machine is only limited to what the cutter will stand. It is impossible to get better results from a 3,000-lb. milling machine.

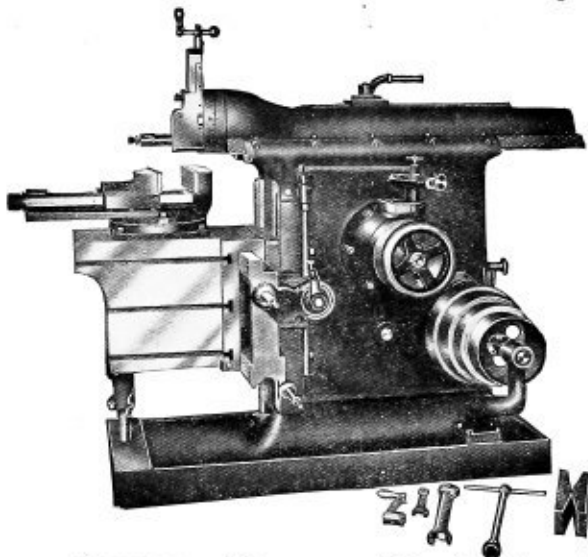
Send for full specifications.

Equipped for regular millingD.P. \$350.00
Extra for special gear-cutting attachment . . .D.P. 166.50
Extra for internal key-way cutting attachmentD.P. 166.50



MACHINE LATHE AND SHAPER TOOLS

The "Milwaukee" Back Geared Crank Shaper



Every garage doing a general line of repair work has need of a first-class shaper, for doing light planing, and for key-seating. We offer the Milwaukee Back Geared Shaper as being the best tool in its class. Some of the features commending this tool to the practical machinist are:

The Base—It is very large, projecting well out from the column. It is of pan design, strongly ribbed inside to insure stiffness.

The Ram—Has quick return and is of strong construction; it has very wide bearing faces.

Table can be swiveled at any angle. It can be removed and work strapped on apron.

Large opening under ram for key-seating.

Simple feed arrangement.

Quick adjustment of stroke.

The back-gear type can be changed from plain geared to back geared and vice versa.

The screw for raising and lowering the table has ball bearings.

The feed and tool head screws have graduated collars.

Cross feed screw is provided with ball bearings.

The material and workmanship are of the highest grade. This machine was designed and is carefully built, with the intention of furnishing the very best tool for its purpose. All machines are given a most careful test before leaving the factory.

SIZE

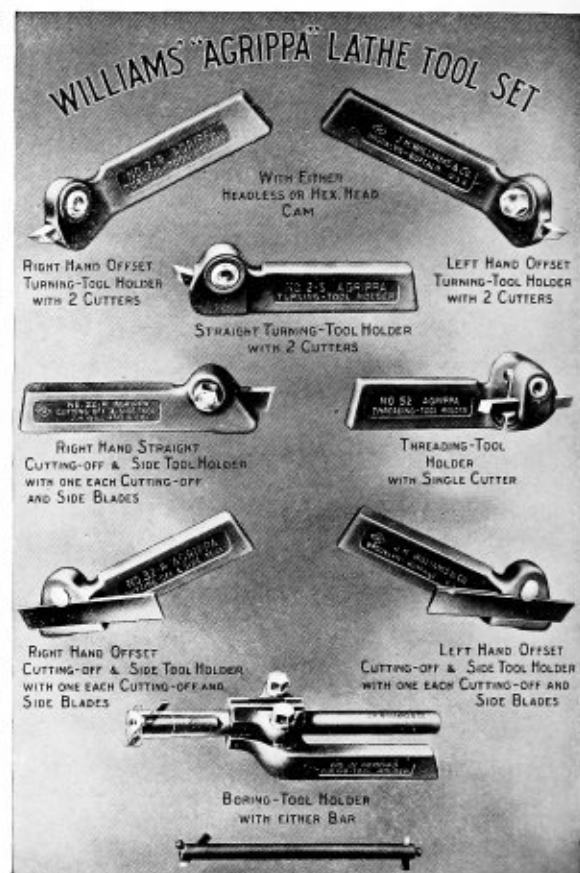
	16-inch Back Geared	20-inch Back Geared
Price, including table support, revolving table, and set of taper jaws for vise.....	D.P. \$777.00	D.P. \$1,054.50

ATTACHMENTS

Regular vise, when ordered separately.....	D.P. \$77.70	D.P. \$88.80
Tilting top for table.....	D.P. \$66.60	D.P. \$77.70
Table support, when ordered separately.....	D.P. \$17.80	D.P. \$17.80
Motor attachment, not including price of motor.....	D.P. \$188.70	D.P. \$200.00
Minimum size of motor recommended.....	2 H. P.	3 H. P.
Motor speed recommended.....	1200 R. P. M.	1200 R. P. M.
Net weight of machine.....	2400 lbs.	3800 lbs.

For full information covering capacity, dimensions, specifications and work that can be performed on this shaper, write our Engineering Department.

Turning, Threading, Cutting-off and Boring



Williams' Agrippa Lathe Tool Set

Can be furnished in sets or separately. Price of sets as follows. These sets are identical with the engraving shown above:

Set Number	Holder Size	For Lathe of Approximate Swing, Inches	Per Set
0	$\frac{3}{4}$ x $\frac{3}{4}$	10 to 12	D.P. \$37.50
1	$\frac{1}{2}$ x $1\frac{1}{2}$	14 to 16	D.P. 42.00
2	$\frac{3}{4}$ x $1\frac{1}{2}$	16 to 18	D.P. 53.70

All holders are furnished with self-hardening steel cutters. For larger size sets, write our Machine Tool Department.

Prices on Single Holders

Number	Holder Size	Each
0	$\frac{3}{4}$ x $\frac{3}{4}$ x $5\frac{1}{2}$	D.P. \$ 3.66
1	$\frac{1}{2}$ x $1\frac{1}{2}$ x $6\frac{1}{2}$	D.P. 4.00
2	$\frac{3}{4}$ x $1\frac{1}{2}$ x 8	D.P. 5.10
3	$\frac{1}{2}$ x $1\frac{1}{2}$ x $9\frac{1}{2}$	D.P. 6.66
4	$\frac{3}{4}$ x $1\frac{1}{2}$ x $10\frac{1}{2}$	D.P. 8.44
5	1 x 2 x $12\frac{1}{2}$	D.P. 10.50

Prices on Boring Bars

Number	Holder Size	Holder Capacity for Bars, Size	Each
80	$\frac{3}{4}$ x $\frac{3}{4}$	$\frac{3}{4}$ to $\frac{5}{8}$	D.P. \$7.55
81	$\frac{1}{2}$ x $1\frac{1}{2}$	$\frac{3}{4}$ to $\frac{5}{8}$	D.P. 9.20
82	$\frac{3}{4}$ x $1\frac{1}{2}$	$\frac{3}{4}$ to $1\frac{1}{2}$	D.P. 12.30
83	$\frac{3}{4}$ x $1\frac{1}{2}$	$\frac{3}{4}$ to $1\frac{1}{2}$	D.P. 17.40

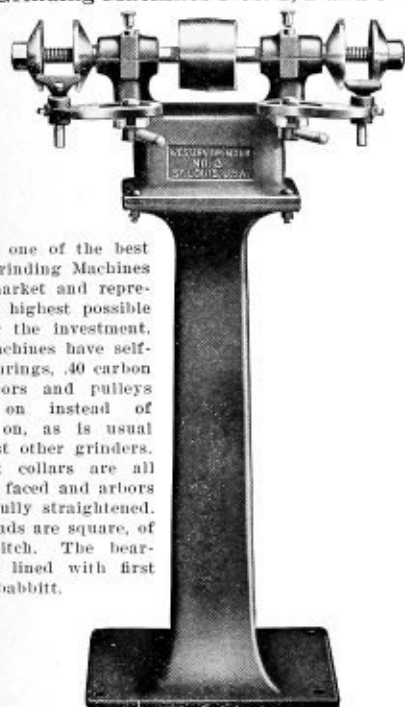
Prices for Extra Bits or Cutters

Lathe Tools, per dozen.....	D.P. \$9.20
Cutting-Off Tools, per dozen.....	D.P. 15.50
Boring Bars, per dozen.....	D.P. 2.70



MACHINE TOOLS

Grinding Machines Nos. 1, 2 and 3



This is one of the best line of Grinding Machines on the market and represents the highest possible value for the investment. These machines have self-oiling bearings, 40 carbon steel arbors and pulleys pressed on instead of screwed on, as is usual with most other grinders. The fast collars are all carefully faced and arbors are carefully straightened. The threads are square, of coarse pitch. The bearings are lined with first quality babbit.

Prices Nos. 1, 2 and 3 Grinders.

Rests are regularly furnished on these sizes.

	Machine No. 1	Machine No. 2	Machine No. 3
Head with Plain Pulley.....	\$8.88	\$11.65	\$17.20
Column	8.88	11.10	15.00
Countershaft	7.77	10.00	12.75
Complete	25.50	32.75	45.00
Extra for T. & L. Pulley.....	3.35	3.90	3.90
Extra for Wheel Guards, Pair 6.66 & 7.77	6.66	8.88	10.00
Wheels Recommended, inches 6x1 1/2 or 8x1	10x1 1/2	12x2	1
Diameter Between Collars, ins.	16	25	45
Weight of Head, lbs.	45	65	95
Weight of Column, lbs.	35	45	55
Weight of Countershaft, lbs.	35	45	55
Weight Complete Machine, lbs.	96	135	195

No. "O" Grinding Machine



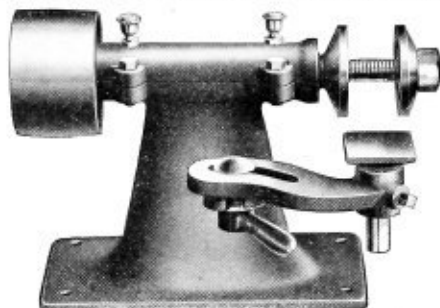
The No. "O" is the smallest of this line. It has the same excellent features as the Nos. 1, 2 and 3. It can be furnished with tight and loose pulleys, column and countershaft.

Price No. "O" Machine.

Rests Not Included.

Head with Plain Pulley.....	D.P. \$7.77
Column	D.P. 8.88
Countershaft	D.P. 9.77
Complete	D.P. 24.40
Extra for T. & L. Pulley.....	D.P. 3.35
Extra for Wheel Guards Per Pair.....	6" and 8"
Wheels Recommended, inches	6x1 1/2 or 8x1
Diameter Between Collars, inches	12
Weight of Head, lbs.	45
Weight of Column, lbs.	35
Weight of Countershaft, lbs.	35
Weight Complete Machine, lbs.	92

No. 10 Single Head Grinding Machine



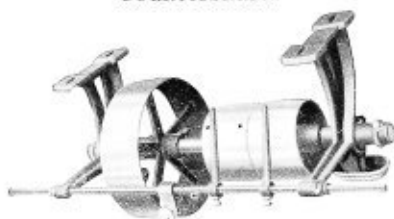
This little tool is one of the best ever manufactured. It fills the wants of those small garages and repair shops not having a large volume of work. Note the very long bearing, the system of oiling and the convenient rest. This machine can be furnished with tight and loose pulleys, column and countershaft.

Price No. 10 Machine.

Rests Included in This Price.

No. Machine	10
Head with Plain Pulley	D.P. \$8.88
Column	D.P. 14.45
Countershaft	D.P. 10.00
Complete	D.P. 33.30
Extra for T. & L. Pulley	D.P. 3.90
Wheels Recommended, inches	10x2 or 12x1
Diameter Between Collars, inches	4
Weight of Head, lbs.	25
Weight of Column, lbs.	95
Weight of Countershaft, lbs.	55
Weight Complete Machine, lbs.	175

Countershafts



The above cut illustrates the countershafts furnished with grinders shown on this page. Prices are listed under each machine. They can also be furnished separately for use in connection with other tools. They are well and substantially made, and have 40 carbon steel shafts.

Wheel Guard

Some states have enacted laws requiring guards over all types of grinding wheels. We illustrate our open type wheel guard, which we know to be the most simple and effective on the market. It consists of a steel channel rolled to a segment of a circle as shown. This is very stiff and unbreakable, and is further reinforced by a heavy cast-iron bracket riveted to the inside flange of the channel. This guard is light, convenient and easy to adjust backward, so that the lips of the guard can always be kept close to the wheel, out of the operator's way, eliminating the danger of dropping material between the wheel and the guard. Prices shown under the various machines.





SHAFTING, HANGERS AND PULLEYS

We carry a complete line of high grade cold rolled steel shafting in rounds or squares. This shafting is all true to size made—made to Whitworth Standard Gauge—accurately straightened and with lathe cut ends.

Price—Round Shafting

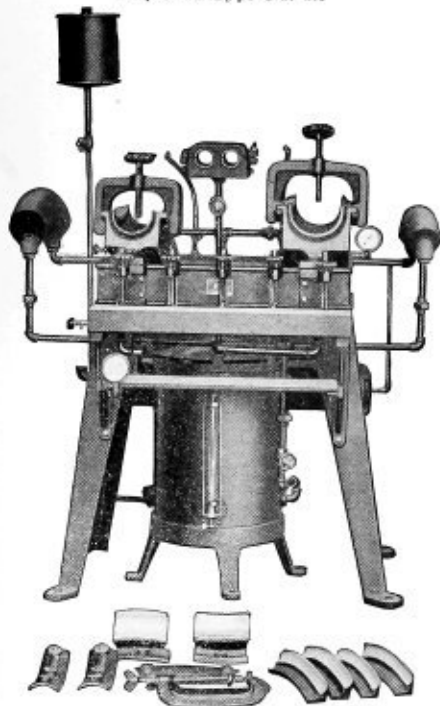
Diam.	Weight Per Ft.	Price Per Lb. Cents	Diam.	Weight Per Ft.	Price Per Lb. Cents	
3"	24.05	D.P. 7½	1 1/2"	3.77	D.P. 8	
3 1/2"	24.06		1 3/4"	3.88		
4"	22.09		1 7/8"	3.99		
4 1/2"	21.15		2"	3.11		
4 3/4"	20.21		2 1/8"	3.02		
5"	19.31		2 1/4"	2.68		
5 1/2"	18.41		2 3/8"	2.52		
5 3/4"	17.55		2 1/2"	2.35		
6"	16.70		2 5/8"	2.20		
6 1/2"	15.89		2 7/8"	2.05		
6 3/4"	15.07	3"	1.94	D.P. 8½		
7"	14.25	3 1/8"	1.90			
7 1/2"	13.52	3 1/4"	1.77			
7 3/4"	12.80	3 3/8"	1.50			
8"	12.07	3 1/2"				
8 1/2"	11.35	3 3/4"	1.38			
8 3/4"	10.69	3 7/8"	1.26			
9"	10.03	4"	1.17			
9 1/2"	9.39	4 1/8"	1.05			
9 3/4"	8.78	4 1/4"	1.00			
10"	8.18	4 3/8"	.845	D.P. 9½		
10 1/2"	7.61	4 1/2"	.697			
10 3/4"	7.06	4 3/4"	.586			
11"	6.52	4 7/8"	.511			
11 1/2"	6.01	5"	.450			
		5 1/8"	.375			
		5 1/4"	.320			
		5 3/8"	.260			
		5 1/2"	.197			
		5 3/4"	.130			
		5 7/8"	.095			
		D.P. 8			D.P. 11	
						D.P. 11
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	
		D.P. 8			D.P. 11	



VULCANIZERS

Hill-Stage Heavy Duty Vulcanizer

Improved Type No. 5A



Here is the ideal "plant" type Vulcanizer for the garage or repair shop doing a general line of vulcanizing. It is built by an expert in that line and every possible condition that might arise in the vulcanizing industry has been provided for. Its capacity, as you will note below, is far above any plant of equal size on the market. It performs its work quickly and in a highly satisfactory manner.

This machine has a capacity of five casings, five tubes, one motorcycle tire, two bicycle tires, in one heat. It will handle casings up to 5 inches, tubes of all sizes, motorcycle tires all sizes, bicycle tires 1½ inches and 1¾ inches.

This vulcanizer is wholly self-contained. Has jacketed boiler of large capacity, with either gas or gasoline burner.

Equipment includes two tread molds for casings, finely machined, of good depth and of proper thickness to insure a perfect cure; two inside molds; one large side mold; bead molds, both clincher and Dunlop; surface-heating motorcycle molds and steam-jacketed bicycle molds; also expansion tank for air. Only four sizes of air bags required with this plant as against twice that number on most machines of like capacity. On account of its compactness and large capacity and low cost of operating this is without exception the best money-making plant on the market.

Guarantee—Each and every plant is guaranteed to do first-class work under proper conditions and is warranted covering material and workmanship.

All machines are tested before leaving the factory and are shipped set up. Net shipping weight, 675 pounds.

Price.....D.P. \$300.00

N. B.—This plant may be enlarged at any time by the use of patent lengthening bars, and at a very nominal cost. Be sure to specify whether gas or gasoline type is desired.

Hill-Stage Revolving Tube Vulcanizer

Improved Type No. 3A



This is an extraordinary plant—something every vulcanizing shop has been looking for. It is a Special Revolving Tube Vulcanizer of large capacity and with every possible convenience for quick handling of the work.

This machine carries a practical porcupine boiler, which at all times insures a rapid and uniform heat.

Notice the spider or tube carrier at the top of the central post. This post and carrier revolves, permitting the operator to handle his work without changing his position.

The capacity is extremely large—six automobile tubes at once or eight motorcycle and bicycle tubes at once.

This machine can be operated with gas or gasoline or with steam direct from boiler. The burner used is of large capacity, can be throttled down and is under complete control at all times.

Equipment includes steam gauge and safety valve. When ordering be sure to specify whether gas or gasoline type is desired.

Price complete as shown above.....D.P. \$55.50

The necessity for an up-to-date vulcanizing plant in every town is reflected in the large number of these equipments we are distributing. Vulcanizing is one of the best paying industries ever developed. The growing number of automobiles on the road and the fact that every tire at some time or other needs vulcanizing shows the need for a plant of the types shown here in your city.

WHY NOT BE THE PIONEER? INSTALL A VULCANIZING PLANT AND ESTABLISH A PERMANENT BUSINESS.



Gibson Quality Combined Welding and Decarbonizing Outfit



The only practical method of welding is by the use of oxygen and acetylene gas. For many years engineers have been experimenting with this combination and the net result has been the development of equipment that gives maximum efficiency with minimum labor and expense.

In former years the usual method of welding has been by the use of forges or heating furnaces, in which the metal has been raised to the highest heat possible, and the weld was then made by the aid of hammers, either steam or hand. This was both unsatisfactory and expensive. As a rule the metal cooled before the weld was finished and the result would be that a "pipe" or unwelded streak would exist at the point welded. With the oxygen-acetylene process the edges of the metal are melted under a heat averaging 6500 degrees Fahrenheit. As these edges are brought to the proper heat, new metal is melted into the molten mass and the whole allowed to cool. This, therefore, makes the welded parts as one piece, and it is impossible for flaws to exist at the weld with ordinary care in the handling.

The Gibson Quality Combined Welding and Decarbonizing Outfit is the highest developed equipment ever manufactured for this purpose. It represents years of experimentation and test. It has been simplified to the last degree and can be successfully operated by any average mechanic. It will weld any metal and will take care of the smallest kind of work or weld the heaviest engine base.

It comes complete in a neat carrying case, as shown in the above illustration. Everything necessary to perform any kind of welding is included. It is one of the greatest discoveries of the age and has proven a great money-maker for the garage or repair man.

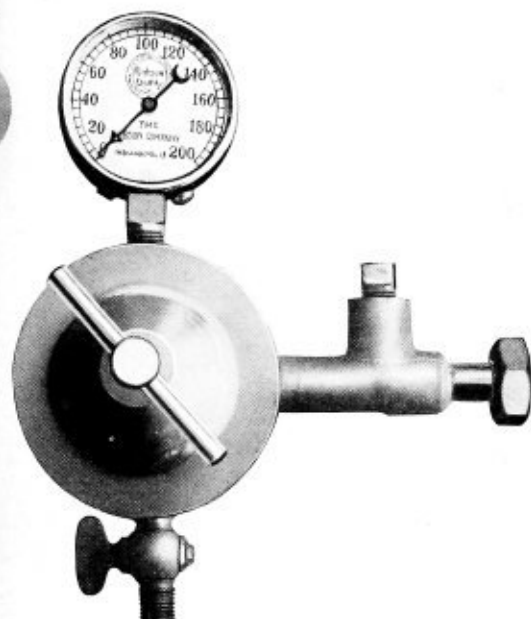
The Gibson Quality Combined Welding and Decarbonizing Outfit is fully guaranteed, covering material and workmanship. A book containing full instructions for operating is furnished with each equipment.

This outfit has a carbon-removing attachment (decarbonizer) for removing encrusted carbon from automobile cylinders. This is, without doubt, the only practicable and scientific way to perform this work. This equipment is fully described on another page.

The Gibson Quality Combined Welding and Decarbonizing Outfit will do the work of a \$1000 plant. It is perfectly safe to handle, as every part is made extra heavy, and special precaution has been taken in the design of the torch and reducing valves to avoid back-fire.



Gibson Quality Combined Welding and Decarbonizing Outfit



PLEASE refer to the engravings shown on this page. The reducing valve is the most sensitive built for this class of work, at the same time it is extremely heavy for the purpose of taking care of the high pressures found in Oxygen tanks. The gauges are calibrated and accurate. One of these valves is used on the Acetylene tank and one on the Oxygen tank. They regulate the pressure coming from the tanks and used for the welding flame.

The Torch shown below is our own special design and the most convenient ever built. It has special regulating valves of the needle type. These valves are operated by the thumb, and both gases are regulated by the hand using the torch; it is unnecessary to lay down the welding rod to adjust the gas, as is the case with all other torches. These valves have right and left-hand threads and turn in the same direction—confusion in handling is therefore impossible. The head of this torch is so constructed that back-fire is impossible. By arranging a series of chambers, the temperature of the gases is preserved, but cannot ignite in the torch head. The tips are patented non-fusible copper, of a special composition, and will resist 7500 degrees of heat.

The outfit is used in connection with Prest-o-Lite or Acetylene Gas tanks, and compressed Oxygen tanks. Prest-o-Lite can be obtained in any section, and Oxygen can be purchased from us in special tanks which we sell direct to the garage and will refill, or they can be leased from the Linde Air Products Company, who have stations in all parts of the United States.

This outfit comes complete in every detail. Fluxes for handling different kinds of metals, and welding rods of iron, steel, brass and aluminum are included. It will do every class of welding and every up-to-date shop should have one.

Price D.P. \$111.00

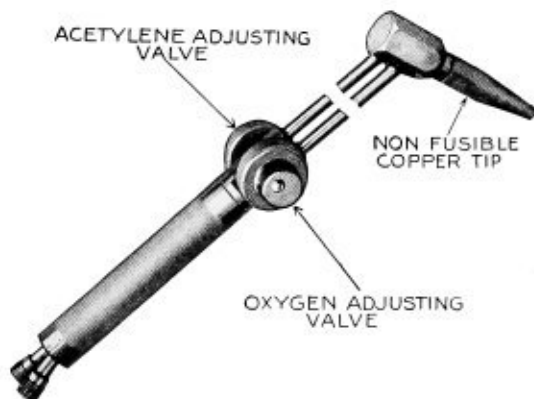
And the best investment you ever made.

Fluxes and Welding Rods for Use with Welding Outfit

Cast Iron Flux in $\frac{1}{2}$ -lb. can, each	D.P. \$0.22
Brass and Copper Flux, $\frac{1}{2}$ -lb. can, each	D.P. .33
Aluminum Flux in $\frac{1}{2}$ -lb. can, each	D.P. .33

WELDING RODS

Iron, per pound	D.P. \$0.33
Norway Steel, per pound	D.P. .26
Nickel Steel, per pound	D.P. .66
Brass, per pound	D.P. .72
Copper, per pound	D.P. .88
Aluminum, per pound	D.P. 1.44





Gibson Quality Oxygen Carbon Remover

THE laborious method of scraping carbon from motor cylinders is a thing of the past. Science has finally discovered an efficient process for removing all the carbon from cylinders, cylinder heads and valves, in a remarkably short space of time, and at very small expense. By the old method the work was laborious and unsatisfactory; it was impossible to get at all the parts of the cylinder, and the result was that much incrustation remained. Carbon is a great problem; it means less mileage per gallon of gasoline, it means loss of power, it means lubrication losses; and in fact any number of things that create trouble for the motorist.

The Gibson Quality Oxygen Carbon Remover has solved the most troublesome problem the motorist and repair man must face.

Do not confound this appliance with the many cheap outfits offered. The Gibson Quality Decarbonizer is designed along the most approved engineering lines.

A man can clean a four-cylinder car in thirty minutes. The usual charge is 75 cents per cylinder, or \$3.00 for the job.

Price.....D.P. \$28.90

Oxygen for use in connection with this carbon remover can be obtained from us by purchasing an Oxygen Tank, which when empty will be refilled at a nominal cost.

Oxygen for Use in Connection with Welding Outfits and Carbon Removers

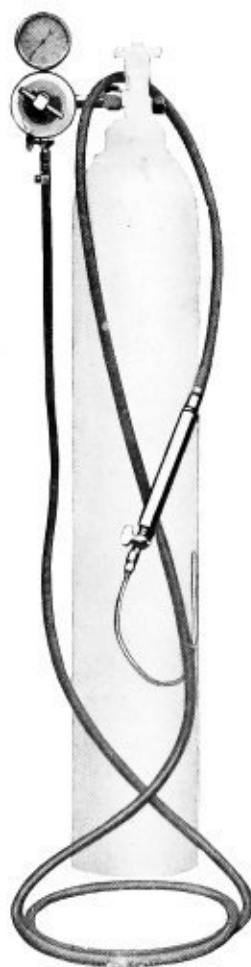
We carry a large stock of Oxygen Tanks in three sizes. These tanks are filled with the highest grade oxygen obtainable. Oxygen is obtained by three processes—extraction from the air, by precipitation of chemicals, and by extraction from water. We handle the latter, as it is conceded the purest of the three. It contains no impurities whatever, and will give better results with less gas expense than either of the other kinds.

When a tank is purchased it is charged to capacity. When this gas has been used, the tank can be returned to us, charges prepaid, and a refill will be furnished. The tank remains your property and there are no rental charges as is the case when this gas is purchased from other concerns.

Prices		
60-foot Tanks	Each	D.P. \$30.60
Refills		D.P. 3.90
100-foot Tanks	Each	D.P. 41.10
Refills		D.P. 4.44
200-foot Tanks	Each	D.P. 53.40
Refills		D.P. 8.90

Prices of tanks include first charge of Oxygen. Prices are f. o. b. Cincinnati.
If Oxygen is delivered from Indianapolis add $\frac{1}{4}$ cent per cubic foot net.

All tanks should be carefully tagged, giving name and address of party returning them.





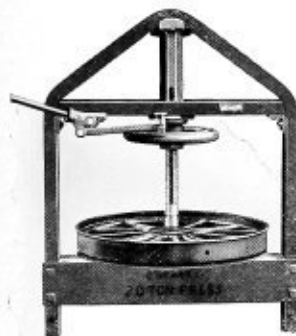
GARAGE PRESSES

Weaver Garage Press

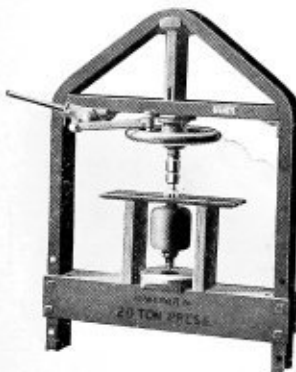
For many years the garage and repairman have been seeking a press which could be used in various ways for handling certain work that has involved much labor and difficulty.

The Weaver Garage Press is the solution of these troubles. It is an asset to any repair shop. It would mean much to every garage to have one of these presses as a part of its equipment. It places them in position to handle work of the heaviest nature and in a truly mechanical manner.

It will save hours every day replacing a sledge hammer and block. It will gain a garage prestige as the work performed is more scientific and satisfactory than can be performed in old and antiquated manner.



The unusual width of this Press enables it to accept the largest automobile wheels intact for pressing out bearings, bands, etc.



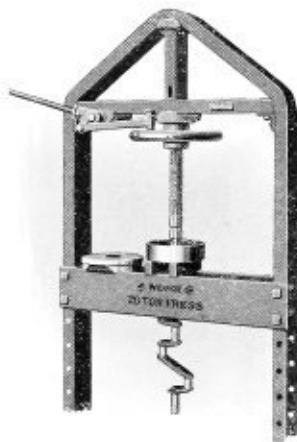
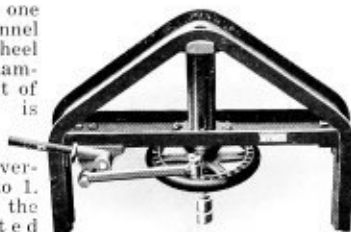
Delicate operations can be performed with absolute safety. The above suggests the manner of securing a snug support for delicate parts under pressure.

Construction and Operation

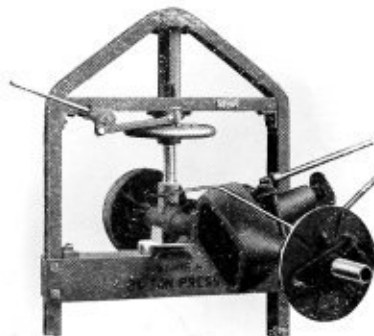
The wide bearing is a great advantage in straightening shafts, axles, etc.

The frame is of one piece of heavy channel steel; the hand wheel is 15 inches in diameter, and the weight of wheel and screw is carried upon ball bearings. The hand lever has a leverage of over 1,500 to 1. The thrust of the screw is directed against heavy bronze thrust bearings. The screw is 2 inches in diameter, with 3-pitch Acme thread and has a range of movement of 12 inches. The screw does not revolve.

The bolster which carries the plate can be set at any desired height with extreme adjustment of 48 inches. The width between frame uprights is 32 inches. Floor space, 36x36 inches; weight, 425 pounds.



Crank shafts and similar bulky pieces can be very easily handled by reason of the divided bolster, as illustrated above.



The vise block attachment provides a means of holding ponderous awkward work in convenient position for working. Will also hold work against a twisting strain, etc.

EachD.P. \$106.60



VALVE GRINDING TOOLS AND HACK SAWS

G. B. Valve Tool

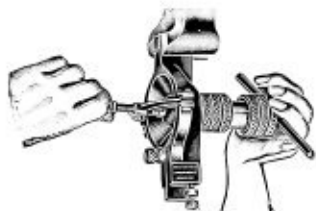


Illustration Showing Use of G. B. Tool

The G. B. Valve Tool is a miniature hand lathe made especially for dressing valves. A radical change from all devices previously used. It is a time and money saver. An outfit will pay for itself in a few operations.

The G. B. Valve Tool is made of drop-forged steel, case hardened and ground until it is absolutely true. It has features possessed by no other tool for grinding valves. The knife can be removed and resharpened easily, and the tool is so constructed that each operation is perfect.

We recommend to the user of this tool our reseating outfit, the cutters of which are ground to fit all valves dressed by the G. B. Valve Tool. You are then assured of a perfect 45-degree seat.



No. 2 Outfit consists of:

One G. B. Valve Tool, Complete.	One Extra Blade.
One Reseating Holder.	One Socket Wrench.
One 1½-in. Cutter.	One 2½-in. Cutter.
One 1½-in. Cutter.	One 2½-in. Cutter.
One 1½-in. Cutter.	One 2½-in. Cutter.
One 1½-in. Cutter.	One 2½-in. Cutter.
One 2-in. Cutter.	One 2½-in. Cutter.
One 2-in. Cutter.	One 2½-in. Cutter.
One 2-in. Cutter.	One 2½-in. Cutter.

In Finished Hardwood Case, each.....D.P. \$66.66

Starrett Patent Hack Saw Frames

Spring plungers overlap the ends of the saw, automatically holding it to its home. By slightly pushing them back the saw may be instantly removed, thus furnishing the most convenient way of attaching or detaching the saw ever devised. An improved nut within the handle, turning with it, gives the desired tension to the saw, which may be quickly and conveniently set at any required angle. The adjustable or extension back frames have improved spring pawls which securely hold the frames to receive saws of various lengths. The frames are neither too light nor too heavy—just right—are finely finished and nickel plated. In appearance, workmanship and utility, these tools are not approached by any other hack saw frames made.

No. 140, with one blade, each.....D.P. \$1.66



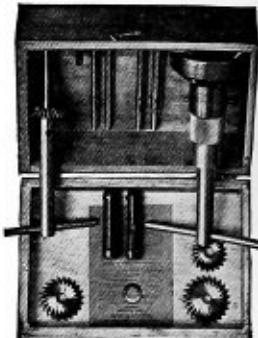
Fosnacht Valve Reseater

Fifty per cent. of automobile troubles can be traced directly to the engine valves. Pitting, warping, loss of shape and many other troubles mean loss of compression—less motor power. The power of an automobile is no stronger than the efficiency of the valves. Make your valves right and keep them right and half your automobile troubles will disappear.

You know the difficulties of reseating valves by the old method—the removal of the engine from the car—the difficulty of centering and turning the valve seats in the lathe—the turning of the valves themselves—the reassembling of the entire engine. All this takes time and labor and all you get out of it is a small price and an inaccurate job that breeds dissatisfied customers.

With a Fosnacht Reseater you don't need a high-priced lathe or big shop. No tearing down of motor necessary. Remove the valves and carbon—place them in the Fosnacht Reseater and turn it over a few times. That puts the valves in perfect alignment.

For the valve seat use the proper size seat-cutter and stem to fit the Valve Guide. Three turns of the cutter give a perfect seat. Replace the valves, polish the points of contact—and you are through!



"The Garage Man's Friend"

The Parts—The Price

1. Valve Reseater Handle	\$2.00
2. Valve Reseater Handle Body	2.00
3. Valve Reseater Head with Blades	13.00
4. Chuck Collar	.50
5. 13/32-in. Universal Chuck	4.00
6. 9/16-in. Universal Chuck	4.00
7. Reamer Handle	3.90
8. 5/16-in. Pilot Stem	.50
9. 3/8-in. Pilot Stem	.50
10. 13/32-in. Pilot Stem	.50
11. 7/16-in. Pilot Stem	.50
12. 1/2-in. Pilot Stem	.50
13. 1½-in. Reamer	4.80
14. 1½-in. Reamer	4.80
15. 2½-in. Reamer	5.00
16. 2½-in. Reamer	5.20
17. Valve Head Blades (set of 3)	4.00
18. Knurled Collar	.50
19. Hardwood Case	3.00
—Special Sizes of Reamers—	
20. 1½-in. Reamer	4.40
21. 2 25/32-in. Reamer	5.40
22. 3-in. Reamer	5.60
All Reamers furnished 30 or 45 degrees as ordered.	
Complete Set	D.P. \$55.50

Starrett Hack Saw Frame

This solid steel frame is very stiff, the stock in same being wider than commonly used, and it cannot be cramped by straining the blade. The saws may be set to cut in either of four directions and tightened by simply turning the handle. It is well made and in every way just right. Polished and nickel plated.

No. 141—12-inch, with one blade, each.....D.P. \$1.66



Hack Saw Frame



This is, we believe, a better frame for the price than any other make. The stock is wider and stiffer than commonly used and cannot be cramped when saws are strained up, and will not tremble when used. It is well made with our improved adjustable back and will take in 8, 9, 10, 11 and 12-inch saws, which may be set to cut in either one of four directions, and tightened by simply turning the handle. Polished and nickel plated.

No. 146, with one blade, each.....D.P. \$1.88



GIBSON QUALITY MASTER VIBRATORS

High Duty Type

WITH a service record of several years on thousands of Fords and other cars, we offer the **Gibson Quality High Duty Master Vibrator** as being the best instrument of this type on the market. No accessory is so important and necessary to the successful operation of an automobile using Multiple Type Vibrating Coils as the **Gibson Quality High Duty Master Vibrator**. It corrects the standing defect in the Ignition system, unifies the spark control, insures proper timing and guarantees uniform current flow from the magneto or batteries to the spark plugs. We combine in the **Gibson Quality High Duty Master Vibrator** all the excellent features demanded in an instrument of this type. We have eliminated questionable and unreliable elements found in the majority of Master Vibrators. We use genuine Iridium Platinum Points, hardened over a special process. We use a specially designed condenser that guarantees intensification of the current and a hot spark. We use the most approved and simple bridge mechanism.

Every dealer should recommend the **Gibson Quality Master Vibrator** because

- It is correct in design and principle.
- It is built for the condition it serves.
- It has points hardened over a special process.
- It increases the power of every Ford Car.
- It is positively guaranteed covering operation, material and workmanship.
- It is priced right.

Gibson Quality Master Vibrators with Kick Switch, each.....\$15.00
Each...D.P. \$20.00. Dozen Lots, each...D.P. \$18.90

Gibson Quality General Purpose Vibrator

This Vibrator is equal in workmanship and material to our High Duty type. It is not as large and is preferred by those who do not care to invest in the more expensive instrument. It is fully guaranteed by us and will be found to be equal to many Master Vibrators offered at a very much higher price.

Gibson Quality General Purpose Master Vibrator, each.....\$10.00
Each...D.P. \$13.40 Dozen Lots, each...D.P. \$11.66

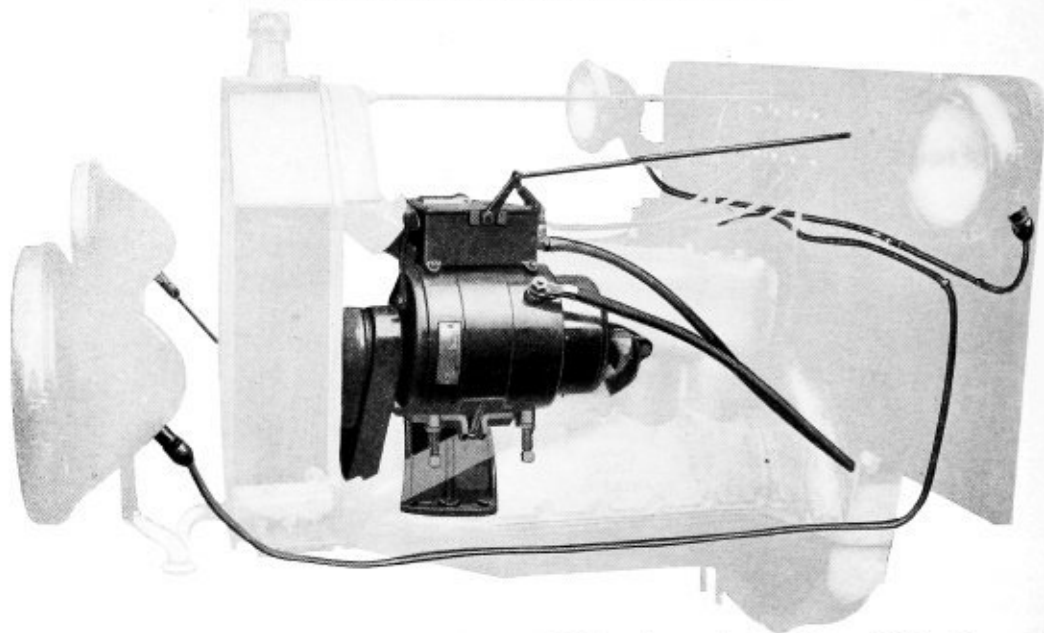




FORD ACCESSORIES

THE GENEMOTOR

Electric Starting and Lighting System for Ford Cars
Manufactured by the General Electric Company



Here at last is the Successful Electric Starting and Lighting System for Ford Cars. Within the past three years many so-called Electric Starting and Lighting Systems for the Ford have been offered, but it remained for the General Electric Company, the largest and foremost manufacturers of electric equipment, to design and build the perfect system. All other types have had their inherent defects that eventually created trouble or necessitated many changes in the car and its engine when installing. The Genemotor is the simplest system ever devised. It is installed on the Ford car without the least change in any part of the chassis, engine or body. All that is necessary is the removal and replacement of several bolts, and the Genemotor is in place, ready for operation.

The General Electric Company have been making Motors and Generators for automobiles for five years and have the largest department devoted exclusively to this work there is in America. They conduct a special technical department that thoroughly analyze and test every piece of equipment produced for automobile service. That department has tested the Genemotor on the Ford car in all kinds of weather under every condition and have subjected it to every known abuse usual to machinery of this character. The Genemotor is now in use on thousands of Ford cars in every part of the world and it has demonstrated conclusively that it is the only Successful Starting and Lighting System for the Ford car.

THE EXCLUSIVE FEATURES OF THE GENEMOTOR ARE:

It has a single chain—

There are no intermediate gears or duplicate chains to grind and get out of adjustment.

It is a 12-volt system—

Every electrical engineer will tell you of the advantage of high voltage in small units. It lessens the weight, requires lower speeds and takes less power to operate.

It is a single unit machine—

This reduces complication to a minimum. The winding is of special design and gives high starting torque. It will spin the Ford motor 175 R.P.M. in the coldest weather.

It is silent in operation—

Having but one chain and a gear reduction of only 2.15 to 1, there is no chain or gear noise as in all other types.

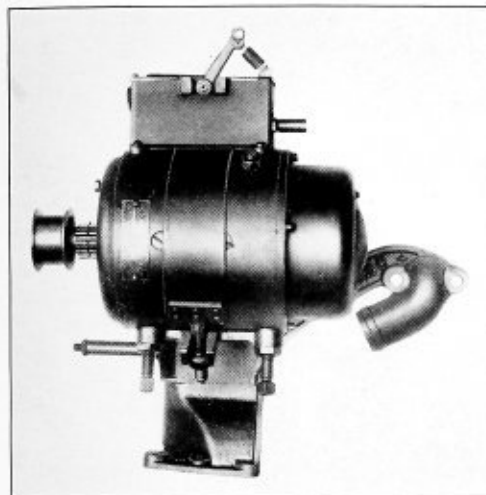
It is guaranteed—

By the General Electric Company to be of the very best material and workmanship and to operate as represented.

FINALLY—This Genemotor makes the Ford a high-class automobile and increases its value 50 per cent.

THE GENEMOTOR

Electric Starting and Lighting System for Ford Cars
Manufactured by the General Electric Company



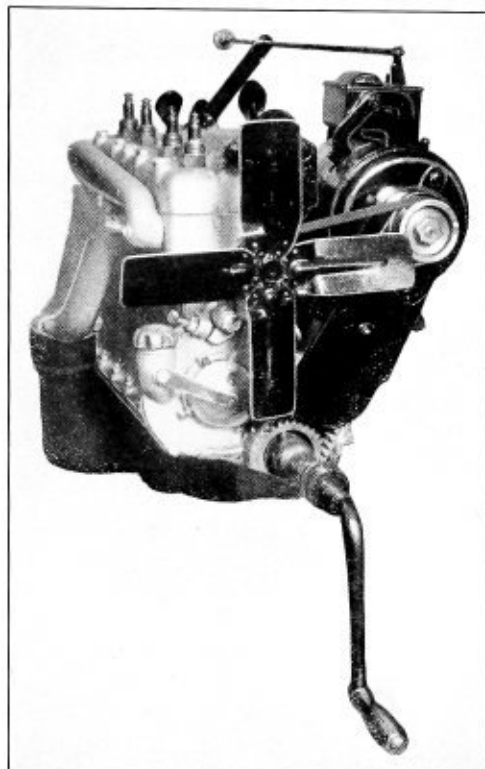
The Genemotor fits snugly to the side of the Ford motor, but—and here is an important feature—it does not prevent the removal of the top of the motor to grind the valves. In most other systems it is necessary to dismantle the starter to remove the top of the motor, but with the Genemotor it does not interfere with any of the usual operations on the engine or its parts.

Please note the above cut, it shows the bare machine, and the simplicity of its installation. It is supported on the right-hand side of the Ford motor by a malleable iron or steel bracket which is secured at three points. The base of this bracket rests on the lower flange of the engine frame, and is fastened thereto by three of the bolts of the engine base flange. The front or upper support is formed by a portion of the casting which replaces the outlet water nozzle.

The third point of support is afforded by a portion of the bracket casting forming the intake nozzle of the water circulating system.

This system of supporting and fastening the Genemotor is unique and very efficient. It is rigid and will not vibrate as is the case with most other systems.

Please note the starting switch at the top of the Genemotor. This is of special design; it will not arc, and as it is fully protected from dust and dirt, it is proof against trouble.



The above engraving shows the front of the Ford Motor with the Genemotor installed thereon. Note the driving sprocket which has taken the place of the fan pulley, and which slips over the end of the shaft. The same fan belt is used as before, but is now driven from the Genemotor shaft. You will also note that the fan is in the same position and on the same bracket as before. This picture also shows the starting button, which projects through the dash, and which is pressed either by the hand or foot. The wiring system used is the two wire type. There is no ground to the frame, as this undoubtedly creates current losses and generator trouble.

A lighting switch is mounted on the dash. This switch controls all lamps, and with it the following combinations can be had:

- Head and Tail Lights.
- Side and Tail Lights.
- Head, Side and Tail Lights.

When the car is running it is storing current in a six cell storage battery mounted on the running board. This battery is of 50 ampere hour capacity. With average care it will run a full season without recharging.

The Genemotor is furnished complete with Storage Battery, Battery Box, Lighting Switch, Chain, Sprockets, and wiring cut to length. It is very easy to install, the average time required by a good workman being five hours—in some cases longer, depending on the condition of the car.

This is the only perfect successful starter and is guaranteed by the largest manufacturer of electrical equipment in the world. It fills a demand that has always existed since the first Ford car was built.

We are distributors for a large area and there may be open territory in your section—better write or wire us at once.

Genemotor, f. o. b. factory, each..... \$75.00
Each.....D.P. \$141.70, f. o. b. factory.



FORD ACCESSORIES

LAMPS

Electric Lamps



10-inch Bullet

No. 310 Electric Headlight, 10-inch front, 7-inch prop center, black and nickel finish.

Per pair.....\$8.00
Per pair....D.P. \$9.44

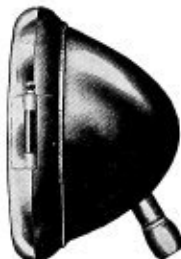
No. 1310 Electric Headlight, 10-inch front, 7-inch prop center, black and nickel finish, with two bulbs, the extra or upper bulb being of less candle power than center bulb and can be used as a dimmer.

Per pair.....\$9.50
Per pair....D.P. \$11.65

No. 206 Electric Side Light, 6-inch front, black and nickel finish.

Per pair.....\$5.50
Per pair....D.P. \$8.33

Any of the above lamps furnished black and brass at same price. In ordering specify finish desired.



6-in. Bullet



No. 32

No. 32 Electric Tail Lamp.
Each.....\$1.25
Each....D.P. \$1.67

Bulbs included in price of all electric lamps.

Harness and Switch as supplied with lamp outfits Nos. 2310 and 3310.



Ford Harness and Switch

Gas and Oil Lamps

No. 80 Gas Headlight, 8-inch front, 5-inch Mangin mirror, 7-inch prop center, black and nickel.

Per pair.....\$8.50
Per pair....D.P. \$11.65



8-in. Gas



No. 126

No. 126 Oil Side Lamp, black and nickel.

Per pair.....\$5.00
Per pair....D.P. \$6.66

No. 124 Oil Tail Lamp, black and nickel.

Each.....\$2.50
Each....D.P. \$3.33

Any of the above lamps furnished black and brass at same price. In ordering specify finish desired.



No. 124

Electric Searchlight



C. S. Searchlight designed to meet the demand for a powerful Searchlight of small size. This lamp is only three inches in diameter, has high grade lens and is furnished with an eight C. P. Tungsten bulb. Has a substantial bracket which is so designed that it can be clamped to edge of any windshield. Bracket is provided with double swivel joint so that light can be thrown in any direction. Complete with cord and attachment plug.

Each.....\$1.00
Each....D.P. \$3.32

LAMPS AND REFLECTORS

Ford Lamp Outfits



Bullet No. 10 Headlight Outfit Complete

No. 2310 Ford Headlight Outfit, consisting of a pair of 310 lamps complete with harness or wiring for connecting to battery or magneto.

Each.....\$10.00

Each.....D.P. \$10.55

No. 3310 Ford Headlight Outfit, consisting of a pair of 1310 double bulb lamps and complete harness for connecting to battery or magneto.

Each.....\$11.50

Each.....D.P. \$12.77



Bullet No. 6 Side Lamp Outfit Complete

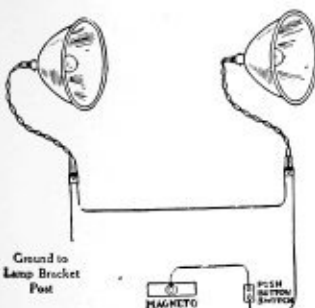
No. 2306 Ford Side Light Outfit, consisting of a pair of 206 side lamps with harness or wiring for connecting with magneto or battery.

Each.....\$7.00

Each.....D.P. \$9.45

Any of above lamps can be supplied in black and brass at same price. In ordering specify finish desired.

Ford Lighting Outfit



This outfit is designed along the lines of those now on the market, but is built in a more substantial manner. Reflectors are made from brass, highly silver plated; wiring is heavily insulated; is fitted with flush turn button switch (instead of cheap lever switch), two sets of Edi-Swan Connectors and packed complete with bulbs.

Do not confound these outfits with the many cheap and unreliable ones that may be offered. We can supply our Gibson Quality Lighting Switch, which regulates the voltage at all engine speeds, instead of regular switch, at an extra charge.

No. 15 Ford Lighting Outfit, 8-inch reflector.....\$5.00

No. 16 Ford Lighting Outfit, 9-inch reflector.....5.00

Per set.....D.P. \$4.22

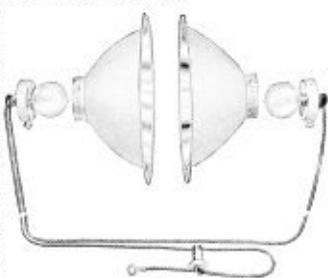
Per dozen.....D.P. \$46.62

For full line Tungsten bulbs see page 115.

For full line Switches see pages 33-34-35.

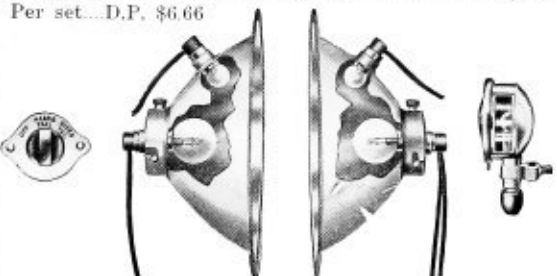
C. & S. Ford Outfits

No. 20 C. & S. Ford Lighting Outfit with reflectors having removable back, which allows the instant renewal of bulbs. The reflectors have been carefully and scientifically laid out to produce the greatest amount of reflective power. They are made of brass and are heavily silver plated over burnished nickel and are in every way the very best obtainable product of first-class workmen and high-grade material. Complete with bulbs and wires.



Per set.....\$7.50

Per set.....D.P. \$6.66



No. 30 C. & S. Combination Ford Lighting Outfit consists of a pair of new style patent reflectors which have been equipped with an auxiliary bulb, an electric tail lamp and a five-point switch. Both large and small bulbs can be removed through the back of the reflector, making bulb renewals very easy. Current for the large bulbs is supplied by the magneto, while dry cells supply current for the auxiliary bulbs and the tail lamp. Supplied either in 8 or 9-inch, price per set.....\$10.00

Per set.....D.P. \$13.32

Complete, as illustrated, without tail lamp, per set.....8.50

Per set.....D.P. \$11.10

Gibson Quality Lighting Switch for Fords

The Ford Magneto furnishes a large surplus of current in excess of the amount needed for ignition purposes. This fact has recently been taken advantage of by Ford owners and the surplus current utilized to operate two electric headlights.

The difficulty heretofore of so operating lights from the Ford magneto has been the burning out of lamps at excessive engine speeds, due to the great rise in voltage. Another trouble caused by attaching electric headlights to Ford magnetos was that failure of ignition was brought about due to the fact that too much current was shunted away from the spark coils by the lamps.

The Gibson Quality Switch was invented to overcome these defects and it accomplishes the results in a very simple and effective manner.

Price complete.....\$3.00

Each.....D.P. \$4.00





FORD ACCESSORIES

IGNITION SYSTEM AND MAGNETOS

Atwater Kent Ford System

The Ford owner who wishes to obtain the best possible power and efficiency from his motor can now install the same high grade ignition equipment used by such well-known car manufacturers as Caalmers, Peerless, Hupmobile, Regal, King, Imperial, Velie and many others.

The Atwater Kent Ford System is made in two forms: Type "K-2" with automatic spark control and Type "H" for use in connection with the regular spark lever.

The automatic spark control greatly improves the performance of the car, and in addition makes it safer, easier and pleasanter to drive.

A few of the many advantages of Atwater Kent ignition on a Ford are as follows:

- 1—Perfect synchronous ignition at all speeds.
- 2—Smooth running without missing or uneven firing, no matter how slow or how fast the motor is running.
- 3—Easier starting in cold weather.
- 4—Will idle at lowest possible speed and throttle down to three miles per hour on high gear.
- 5—All vibrator and magneto troubles eliminated. There are no vibrators and the magneto is not used.
- 6—Leaves magneto free for electric lighting.
- 7—Increased gasoline economy due to the higher efficiency of the motor when the spark is always properly timed.
- 8—Improved acceleration.
- 9—Safe starting, the spark being automatically retarded so as to prevent back-firing.

The Atwater Kent Ford System is quickly and easily installed without alterations or machine work. It will give better results on the Ford cars than any magneto and at a much lower price.

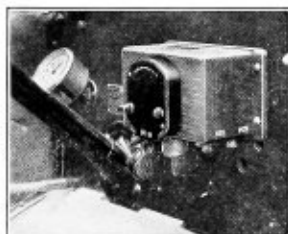
The Atwater Kent Ford System consists of:

- 1—Unisarker complete with necessary equipment for mounting.
 - 2—Coil and switch.
- The Atwater Kent coil can be furnished with either a substantial kick switch, which may be operated with the foot, or with a plate switch somewhat simpler and cheaper in construction if desired.



Type K-2 Ford Unisarker Complete

K-2 with plate switch coil, each..... 28.00
Each.....D.P. \$46.62



Kick Switch Coil on Ford Dash

K-2 Atwater Kent System with automatic spark advance, including kick switch, each.....\$30.00
Each.....D.P. \$49.95



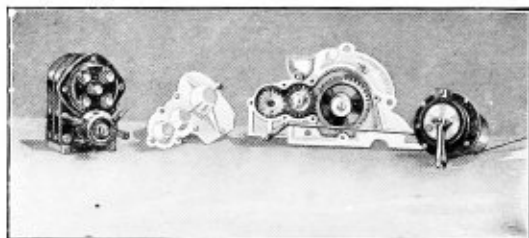
Type H Unisarker with Bracket



Plate Switch Coil

Type H Atwater Kent System, without automatic spark advance, for connection to switch lever, including kick switch coil, each.....\$21.00
Each.....D.P. \$39.96
Type H with plate switch coil, each.....22.00
Each.....D.P. \$36.63

Splitdorf Dual System for Ford



The Splitdorf Ford Dual System comprises a magneto of tried and tested design and construction and a perfected TS transformer for the dash, and, with its installation Ford owners are equipped to meet every emergency—the battery for starting and high-tension current for the running of the engine.

It has a noiseless, enclosed gear-driven installation, and, once on the car, the nuisance and expense of vibrators and the cumbersome box coil give way to an ultra-modern equipment more enduring than the motor.

Easy starting on the battery is advantageous at all times, and the merits of high-tension current for running are recognized in the operation of the highest priced automobiles.

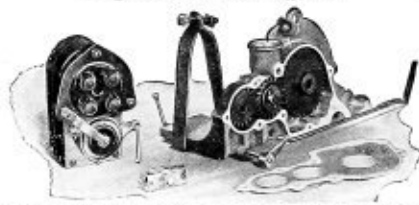
It gives Ford motors a "punch" hitherto unknown—the kick goes into every cylinder synchronically and imbues the motor with a "life" and "pick-up" sweet indeed to the motorist's heart.

Magneto, base, gears and gear housing, TS transformer, wires, terminals, spark-advance rod, plate for dash and all bolts and screws necessary are put up in single box with full installing instructions.

No machine work is necessary. The comparative novice, by following simple instructions, can install a Splitdorf Ford Dual System.

Each.....\$50.00
Each.....D.P. \$88.80

Splitdorf Ford Special Waterproof High-Tension Magneto



Increases motor efficiency; saves its cost in less gasoline consumption; assures constant electric lighting; installed easily, quickly and inexpensively.

It is just what its name implies—a high tension magneto of special construction to meet the special needs of Ford cars. Its general construction, wonderful effectiveness and natty appearance place it in the highest class. With noiseless enclosed gear-driven installation is assures a high tension ignition system second to none. No need for vibrators, coils or batteries—just a clean dash with a single switch, that is a joy to the modern motorist's heart.

The installation is very simple and can be accomplished in a very short time by any one. We furnish everything you need—magneto, base, gears and gear housing, switch wires, terminals, spark-advance rod and all screws and bolts necessary.

The entire outfit is packed in a single box with full instructions for installing.

Each.....\$45.00
Each.....D.P. \$79.92

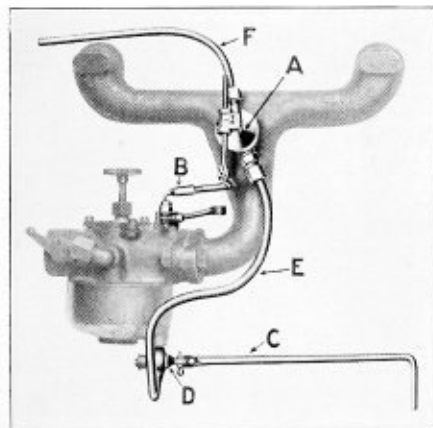
VIBRATOR, GASOLINE SAVER, ETC.

Connecticut Master Vibrator

The principle used in the operation of the Connecticut Master Vibrator is the same as with our other type of master vibrator coils, but the method of attaching is different. With the Connecticut Master Vibrator the coil is concealed behind the dash, only the flush switch being visible, making a very neat appearance and not obstructing the dash as with some of the other types. This vibrator will give the same satisfaction as our other types of vibrators; that is, it unifies the spark control, insures proper timing and guarantees a uniform current flow from the magneto to the spark plug.

Each.....\$9.00
Each, D.P. \$12.21
Doz. lots, each, D.P. \$11.10

A. & J. Gasoline Saver



The A. & J. Gasoline Saver and Primer is especially adapted for Ford cars. Can be attached in thirty minutes. Will save from 20 to 30 per cent of gasoline and increase power and speed. This device is controlled direct from the throttle which is attached to the carburetor. "A" is the hot air valve which extends $\frac{3}{4}$ inch into manifold perforated for mixing the hot air with the gasoline. "F" is hot air pipe leading from exhaust manifold to hot air valve. "D" is three-way pet cock, which is used for draining carburetor and priming motor through priming pipe "E" to hot air valve "A." "C" is primer rod which extends through front of radiator for opening primer. "B" is control lever which operates hot air mixing valve with opening and closing of throttle.

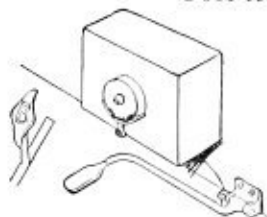
Each.....\$6.50
Each, D.P. \$10.00

"Nyc" Accelerator and Power Adder

The "Nyc" Accelerator and Power Adder for Ford cars only. A 20 per cent increase in power; a 25 per cent saving in gasoline. Prevents carbon, stops engine overheating, keeps spark plugs clean, saves brake lining. Instantly installed between carburetor and inlet pipe. It affords a convenient and positive means of priming, as the valve is easily held open so that gasoline may be injected by means of a squirt can directly into the air chamber, from which it is drawn to all four cylinders at the first turn of starting crank. This saves buying spark plugs with pet cock attachments and is naturally a far better method than removing plugs.

"Nyc" Accelerator and Power Adder.....\$5.00
Each, D.P. \$8.33

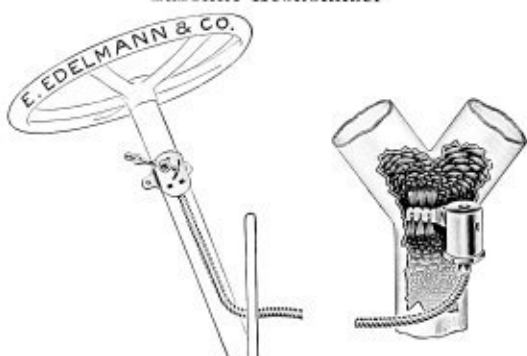
Foot Accelerator



Each, complete.....\$1.75
Each, D.P. \$2.00

No. 45 Foot Accelerator is a very practical device. Is especially handy in driving through crowded streets. When touring, hand throttle can be set to run, say fifteen miles an hour, and when coming to a hill simply bear down on the foot accelerator until you reach the top, then take foot off and you are still going fifteen miles an hour. Easily attached, no machine work, held in place by two wood screws.

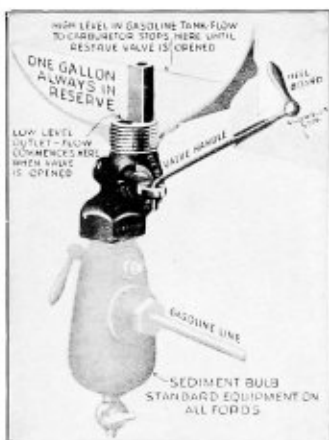
Gasoline Economizer



The Gasoline Economizer especially adapted for Ford cars will save 20 per cent of gasoline. Can be attached in ten minutes. Lever is attached to steering post. By moving the lever you increase the air supply to cylinders at will. The air is broken up into a fine spray and mixes with the gasoline, thus enriching the mixture. The mixer screws into the manifold. A child can operate it. Complete outfit, highly polished, nickel finish, with flexible shaft connecting from steering post to manifold in strong box with full directions for attaching. Gasoline Economizer, complete, each.....\$2.50
Each, D.P. \$3.89

New Era Ford Gasoline Reserve Valve

Every Ford owner can have a reserve gasoline tank on his car by installing, in a few minutes without cutting or soldering, a New Era Ford Reserve Gasoline Valve, which insures him of one gallon of gasoline always held in reserve. It quickly makes two tanks in one, or two compartments in one tank, one of nine gallons and the reserve of one gallon, or enough to go 20 to 25 miles to find more gasoline. The New Era Ford Reserve Gasoline Valve protects the car owner from being stalled for the want of gasoline, or paying extra for having gasoline brought to his car. As a time saver many times a year it will prove worth more than its small cost of \$1.00. Reserve gasoline turned on without leaving the car, as the valve is controlled by a lever through the heel board.



The New Era Ford Reserve Gasoline Valve is easily installed on Ford cars between the gasoline tank and sediment trap, in place of present attachment, which screws in bottom of all Ford tanks, requiring about ten minutes' time and no tool other than an ordinary wrench. It's good for the life of the car; a full paid-up life insurance against delay, bother or worry about getting stuck—sometimes that might be serious.

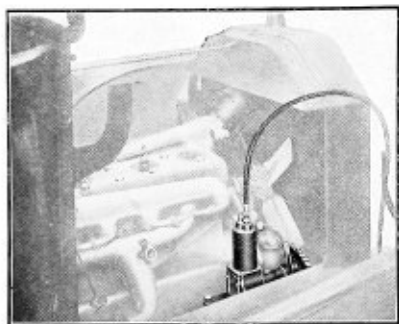
Each.....\$1.00
Each, D.P. \$1.67



FORD ACCESSORIES

PUMPS AND RADIATORS

Kellogg Engine Driven Pump for Ford



This Pump was designed expressly for the Ford car and though the price is considerably lower than other models of Kellogg Engine Driven Pumps, the quality of material and workmanship is the same, and it is covered by the same guarantee.

A most important point to consider in the purchase of an engine driven pump for your Ford is the manner of attaching. You should buy a pump which can be installed without removing the radiator, etc. Such work is an unnecessary expense.

The Kellogg Ford Pump is made of metal throughout and is guaranteed not to spray oil. Cast iron cylinder, piston fitted with metal rings, drop forged crank shaft, bronze connecting rod and bearings, and a simple, though efficient, system of lubrication insure long life to the Kellogg pump.

Each \$9.50
Each...D.P. \$16.87

Manzel Engine Driven Tire Pump for Ford



A real Engine Driven Tire Pump for Ford cars, with positive gear drive. Will inflate a Ford tire in one and one-half minutes. It is all metal and accurately built and supplies only pure air to the tires. It is attached to the side of motor, in most convenient position to operate, and is driven by gear on crank shaft (we furnish combination gear and lower fan pulley for driving).

To attach it to car it is only necessary to remove one engine cylinder nut and one gear housing bolt, place pump in position and replace nut and bolt. Then remove fan pulley and replace it with combination gear and fan pulley furnished with pump. The pump is then ready to operate. Can be installed by any one in forty-five minutes' time. No holes to be drilled and no machine work of any kind to be done.

After being attached it is always ready for use. To operate, attach hose to pump and tire, throw gears into mesh and start the engine.

Price \$7.50
Each...D.P. \$13.32

Complete with gears, 12 feet of air hose and pressure gauge. Everything ready for immediate installation.

Fedders Ford Radiator

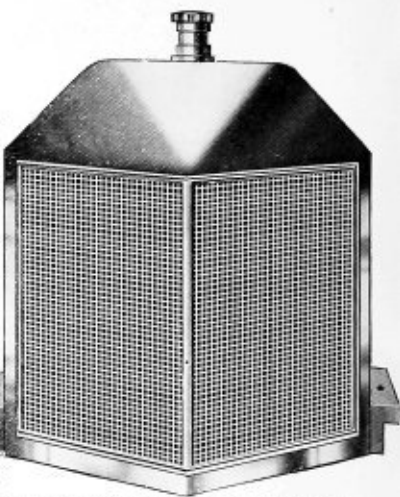
Fedders Radiator built for Ford cars is identical in design and construction with the other Fedders Radiators which have made the name Fedders synonymous throughout the automobile industry with all that stands for high quality and high efficiency in radiator design and construction.

In designing and building this radiator great care has been taken to minimize the amount of time and labor necessary to make the change from the stock radiator which comes on the Ford car to this special Fedders Radiator.

There is not the slightest complication to it. It is an easy job and one that can be accomplished very quickly.

Simply take out the bolts which hold the Ford Radiator in place, loosen the intake and exhaust water pipes, put the Fedders Radiator in the place of the regular Ford Radiator, put back and tighten the bolts which hold it in place and slip on the intake and exhaust water pipes. It is just as simple as it sounds and can be done in a very short time.

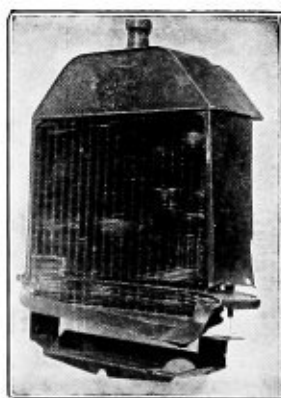
Fedders V-Shape Radiators, polished brass, each.....\$35.00
Each...D.P. \$38.28
Fedders V-Shape Radiators, black enamel, each..... 38.50
Each...D.P. \$64.12
Fedders V-Shape Radiators, German silver, each..... 40.00
Each...D.P. \$66.60



Radiator Support

The weight of the radiator is carried by the thin brass sides that soon become broken by the constant vibration and road shocks. When these sides break, the radiator sags, allowing the tubes to move up and down and rub against the tying sheet which extends across between the brackets. This soon breaks the tubes and it is good-bye radiator. Prevent this by putting on the Martens Radiator Support before the sides break, or, if the side is broken, put the support under the radiator and prevent the tubes from wearing in two.

Each \$1.75
Each...D.P. \$2.22



Ford Radiator Cap

This handsome cast brass cap will add a distinguished appearance to Ford cars besides being more practical for purposes of unscrewing and tightening than regular pattern.

Highly Polished Brass, each.....\$0.40
Each...D.P. \$0.50
Polished Nickel, each50
Each...D.P. \$0.56



Ford Hard Rubber Radiator



These Radiator Caps are made of heavy gauge brass and accurately threaded to fit filler tubes.

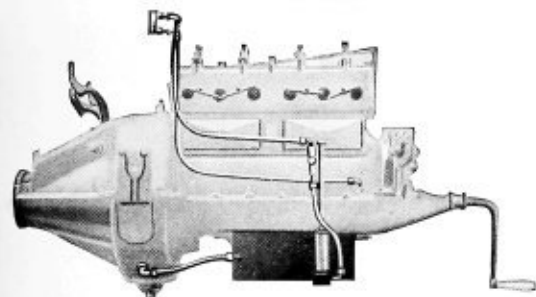
Top is a hard rubber composition attached securely and takes a high finish and makes a very attractive as well as serviceable cap. This top is very easy to grip and remains cool at all times.

Each \$0.40
Each...D.P. \$0.40



LUBRICATORS AND GAUGES

Martens Ford Lubricator



Scored cylinders and pistons, burned out babbitt are frequent troubles to Ford users and nine times out of ten the cause for this is the driver's uncertainty regarding his oil supply. You can not be uncertain with a Martens Lubricator. With the Martens Lubricator the sight feed on the dash tells whether or not the oil is circulating; the gauge on the reservoir tells exactly how much oil you have in reserve. Simple and durable, the Martens Lubricator is as sure in its operation as the valves in your motor, for the oil pump is operated in exactly the same manner as the valves—from the cam shaft.

Each \$15.00
Each...D.P. \$20.00

Brown Sub-Base Oiler

A system designed for the Ford car. Will cool the motor and give 50 per cent more mileage on given amount of oil. Prevents undue carbon, smoking and sooting of plugs. Five hundred miles on one filling. A glance will determine the oil level at all times. The oil is carried by the fly wheel to the front of motor and then distributed to various parts. At a given height the oil passes through the stand pipe into sub-base, cooled and again picked up by fly wheel. Guaranteed.

Each \$6.00
Each...D.P. \$10.00

New York Constant Level Oiler

The New York "Constant Level" Lubricator for Ford cars is installed in fifteen minutes' time by any one. The only tool required is a simple wrench. No gears, belts, cams or rods are necessary for its operation.

Its use prevents the formation of carbon and ignition troubles, as it supplies oil to the crank case in the same proportion that the oil is used by the engine. This doubles the life of engine and transmission bearings and relieves the operator from the fear of burned out bearings, scored cylinders, or an overheated engine, at the same time dispensing with the dirty and disagreeable task of pouring oil in the crank case at frequent intervals.

Each \$10.00
Each...D.P. \$16.10

Oil Gauges

Ford Oil Gauge indicates the correct level of oil in the crank case. To attach, simply remove the lower pet cock from the crank case, attach the gauge and screw the pet cock back into the opening in the gauge. The bent pipe nipple gives correct angle for the gauge.



No. 40

No. 40 Ford Oil Gauge, each \$0.40
Each...D.P. \$0.27

No. 41 Ford Oil Gauge, same as No. 40 with improved protected glass, each50
Each...D.P. \$0.34



No. 41

Ford Dash Board Oil Gauge

No. 43

A decided improvement over the crank case oil gauge. The indicator on the dash makes it unnecessary to almost crawl under the car, which it is necessary to do to read the crank case gauge.

Installed by boring a hole in the floor board for the indicator pipe and connecting the horizontal pipe to the crank case in place of the lower pet cock. The pet cock, screwed into the other end of the pipe, acts as a drain.

Container and indicator pipes are made of heavy gauge brass. Screw cover on container and threaded joints makes it easy to take the gauge apart for occasional cleaning. Each gauge packed in a heavy cardboard box containing full instructions. Weight, about 1½ pounds.

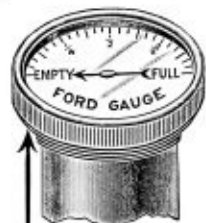
Each \$1.35
Each...D.P. \$1.67



Gasoline Gauge

The Ford Gasoline Gauge is not a mere accessory, but an essential part of every car. You can not afford to be in doubt as to your gasoline supply, or be constantly looking into the tank, measuring it with a stick, guessing at the quantity, often finding that you need more just when there is none accessible, and losing ten times the cost of a gauge in time, trouble and expense. No installation required. Simply replaces the filler cap. Guaranteed to always work perfectly and outlast the car.

The Ford Gasoline Gauge, each \$1.50
Each...D.P. \$2.00



Ford Radiator Cap and Thermometer

Every Ford car should have one of these combination radiator caps and thermometers. It enables the driver to ascertain the temperature of the water in the radiator, thereby preventing overheating or freezing. In polished brass or nickel plated.

Each \$2.00
Each...D.P. \$3.32





FORD ACCESSORIES

FORD CARBURETORS, CUT-OUTS AND RADIATOR HOSE

Model Y Kingston Ford

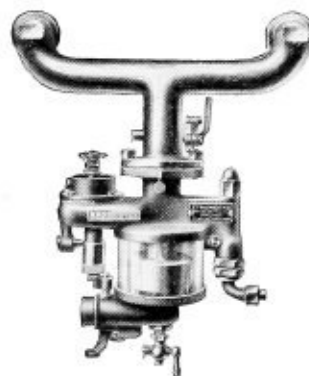


Kingston "Ford Special"

Model L Schebler Carburetor for Ford Cars

Can be installed with very little trouble. The outfit for Ford cars consists of one only 1-inch Model L Schebler carburetor, one manifold, one priming cup, one gasoline connection, tubing and throttle rods.

Price complete, as above \$18.00
Each...D.P. \$33.30

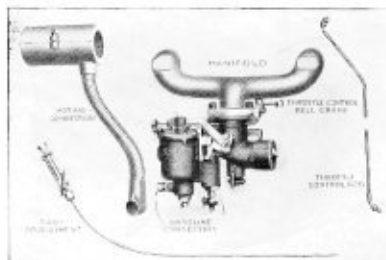


Ford Stromberg Carburetor

Ford Special Rayfield Carburetor

This complete Ford Assembly as shown in the illustration consists of a 1-inch Model "B" Rayfield Carburetor, a specially designed Ford manifold hot air fitting, throttle rod and bell crank, throttle control rod, special gasoline connection and dash adjustment. Packed in a box, complete, ready for quick installation. It can be installed in two hours by an ordinary mechanic.

Price, with all fittings complete \$23.00
Each...D.P. \$24.04

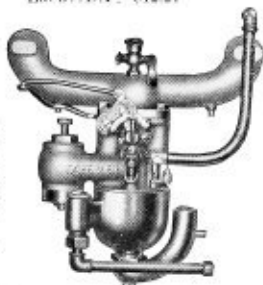


Ford Rayfield Carburetor Assembly

In this carburetor are embraced the very latest features of automatic carburetor construction, serving to make up a combination which is absolutely without parallel where power, speed, efficiency and especially easy starting in cold weather are required.

This carburetor will, without any extra fittings, perfectly fit the Ford Model T manifold and operating rods.

Each \$10.00
Each...D.P. \$12.21

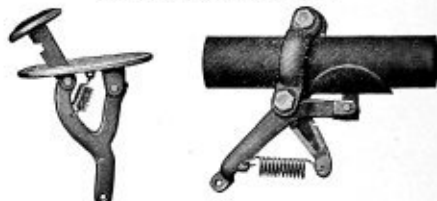


Stromberg Ford

Complete with manifold for Ford cars, also contains a special auxiliary starting device, which consists of a shutter valve in the main air intake, combined with a cam which locks the auxiliary air intake shut. This causes so much suction on the spray nozzle that gasoline is sprayed to the top of the manifold on the first turn of the crank, causing quick ignition; will start on the magneto.

Price, complete, \$30.75
Each...D.P. \$34.57

Ford Cut-Out Outfit



No. 37 Muffler Cut-out Set is efficient, simple and easy to install. Absolutely positive in action and will prevent bursting of muffler; will increase the power of the engine and easily locate skips. To attach, cut 1 1/4-inch hole in exhaust pipe and clamp cut-out in place; fasten pedal in floor board and connect with cut-out by cable furnished. There is no question about a cut-out being a good thing and at our price you can not afford to be without one. Including cable, brass lock-open pedal, etc., ready to attach.

Each \$1.50
Each...D.P. \$1.45

Ford Cut-Out Outfit

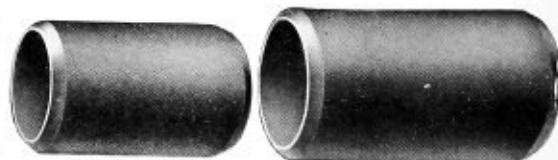
A cut-out is a very necessary adjunct to any car, as it enables the driver by simply pressing a small foot pedal to find out whether his motor is working perfectly and firing properly. It is also claimed that by allowing the gases to escape freely through a cut-out on a hill or grade that the power of the engine is increased. The above cut illustrates a complete outfit we have assembled especially for Ford cars, which are not equipped at the factory with this device. Same consists of an iron cut-out bored to the proper size, a foot pedal, spring and cable chain. The entire outfit is packed in a neatly labeled box.

Outfit No. 1, complete with plain pedal, each \$1.50
Each...D.P. \$1.11

Outfit No. 2, complete with locking pedal, each 1.75
Each...D.P. \$1.11



Radiator Hose



"INLET HOSE"

Gibson Quality Fordoid Radiator Hose is guaranteed not to harden or soften, not to crack or collapse, not to be affected by hot or cold water, oil or anti-freezing solutions, and to give satisfaction under the most severe conditions of service. Every piece is branded. Beware of cheap substitutes. Fully guaranteed. The outlet and inlet hose being of different dimensions, they are packed separately in boxes, each containing one dozen pieces.

No. 3944 Gibson Quality Inlet Hose, each \$0.30
Dozen...D.P. \$1.73

No. 3906 Gibson Quality Outlet Hose, each .25
Dozen...D.P. \$2.45

No. 4 Ford Inlet Hose, each .15
Dozen...D.P. \$1.34

No. 6 Ford Outlet Hose, each .20
Dozen...D.P. \$1.67

Nos. 4 and 6 are made of lighter material than Nos. 3944 and 3906, but are heavy enough for all practical purposes.

HUB CAPS, TRUSS AND RADIUS RODS, ETC.

Ford Hub Cap



An exact counterpart of the standard Ford Model T Hub Cap, made of heavy gauge brass, with accurately machined threads; highly polished. Ten caps packed in a heavy cardboard box. Weight, each, 3 ounces.

Ford Hub Cap, brass, each..... \$0.25
Each...D.P. \$0.23

Ford Hub Cap, nickel, each..... .30
Each...D.P. \$0.27

Ford De Luxe Hub Cap

This is a heavy brass casting of a design similar to that furnished with Packard and other high-priced cars. It cannot be marred with a heavy wrench or dented by an accidental bump into garage posts. Highly polished and finished. A set of four "De Luxe" Hub Caps packed in a heavy cardboard box. Weight, 1 pound.

Ford De Luxe Hub Cap, brass..... \$0.90
Each...D.P. \$1.11

Ford De Luxe Hub Cap, nickel... 1.00
Each...D.P. \$1.34



Ford Wheel Puller



This attachment is very useful in removing wheels from Ford cars. Made in heavy cast iron. Steel set screw.

Each..... \$0.50
Each...D.P. \$0.45

Ford Adjustable Wheel Puller

Made of malleable iron, baked black enameled finish; case-hardened bolts. Each wheel puller packed in a corrugated board box. Weight, 1 1/2 pounds.

Each..... \$0.60
Each...D.P. \$0.56



Ford Brake Shoes



No. 5718, Lined, 2-piece



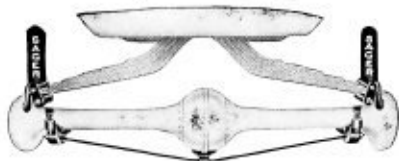
No. 5790, Plain, 1-piece

Duplicates of the brake shoes on the Ford Model T. Made of high-grade gray iron with ground braking surfaces. Complete with springs. Two-piece brake shoes supplied with "everlastingly good" brake lining riveted to the friction surfaces. Weight, per set, about 3 1/2 pounds.

No. 5790, Plain, one-piece type, per set..... \$0.75
Per Set...D.P. \$0.89

No. 5718, Lined, two-piece type, per set..... 1.50
Per Set...D.P. \$1.78

Sager Truss Rod



The Sager Truss Rod (1/2-inch in diameter) for Ford cars is indispensable. It keeps the bearings and gears in more perfect alignment, thus eliminating wear and noise. Fifteen minutes to attach. No machine work.

Each..... \$2.50
Each...D.P. \$3.33

Sager Auxiliary Radius Rod



Adds more than 100% to the safety of the axle and radius rod already on Ford cars, by preventing axle from bending backward which seriously affects steering of the car. An additional advantage of the Sager Auxiliary Radius Rod is in the fact that the Ford axle is always in perfect alignment after adjustment by means of the Sager device. Attachment is quickly made. No machine work necessary.

Each..... \$3.00
Each...D.P. \$4.00

The L-A. Steady Steerer



The L-A Steady Steerer is a strut or radius rod so connected between body and axle as to hold the axle in a position that will cause the road wheels to remain in a straight course set by the steering wheel, by drawing the axle sideways on upward movement, and pushing it on downward movement, keeping the relative distance of steering knuckle and steering post the same under all conditions of driving. This is a great help in keeping the car in the road.

Each..... \$2.00
Each...D.P. \$2.78



Ford Crank Boot

Ford Crank Boots, each..... \$0.35
Dozen...D.P. \$4.00



FORD ACCESSORIES

BALL SOCKETS, BUSHINGS, ETC.

Ford Radius Rod Ball Socket



No. 5114. Radius Rod

No. 5142. Radius Rod

No. 5114. Anti-Rattling Radius Rod Ball Socket. Disc adjustment to take up wear, the disc being inserted under the coil spring as required. Baked black enamel finish. Weight, about 8 ounces; packed in paper box.

Each.....\$0.15
Each, D.P. \$0.60

No. 5142. Anti-Rattling Radius Rod Ball Socket. Screw adjustment to take up wear. Baked black enamel finish. Weight, about 14 ounces; packed in paper box.

Each.....\$0.55
Each, D.P. \$0.75



No. 5155. Connecting Rod

No. 5785. Connecting Rod

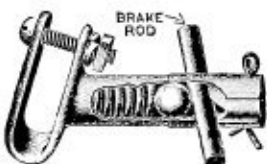
No. 5155. Anti-Rattling Connecting Rod Ball Socket. Screw adjustment to take up wear. Baked black enamel finish. Two required on every Ford car. Weight, 6 ounces; pair packed in paper box.

Per pair.....\$0.70
Per Pair, D.P. \$0.89

No. 5785. Anti-Rattling Connecting Rod Ball Socket. Fitted with brass oil cup for lubrication, which can also be turned up to off-set the wear. Baked black enamel finish. Weight, 5 ounces; pair packed in paper box.

Per Pair.....\$0.70
Per Pair, D.P. \$0.89

Brake Rod Support



Our brake rod support takes the place of the present Press Steel Support on the Ford Model T cars. Repair parts No. 3470. The Steel Supports are continually breaking and the rods vibrate with them.

Our supports are made from high-grade bronze and malleable. The hardened steel ball is held in tension against the brake rod and in use this ball turns and does not wear the rod. Put in the car without removing rod.

Bronze, each.....\$1.50
Each, D.P. \$1.34

Malleable, each.....1.00
Each, D.P. \$1.00

Ford Fender Braces

A clever device which eliminates the rattle of the fenders on Ford cars.

Can be attached by any one in a few minutes. The small size is used on the rear fender of runabouts.

The large size on front touring car fenders.

Made of steel and black japanned.

No. 7 Ford Fender Brackets, each.....\$0.10
Dozen, D.P. \$1.22

No. 8 Ford Fender Brackets, each......05
Dozen, D.P. \$0.66

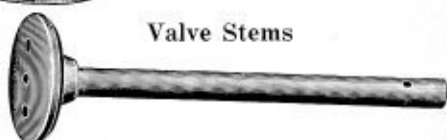


Ford Bronze Bushings

True in size to the Ford standard. Highest quality bearing bronze.

No. 2713, each.....\$0.10
Doz., D.P. \$1.00

No. 2714, each......05
Doz., D.P. \$0.89



Valve Stems

Exhaust and Inlet Valve made to fit the Ford motor and give satisfactory results in service.

Each.....\$0.40
Dozen, D.P. \$4.44

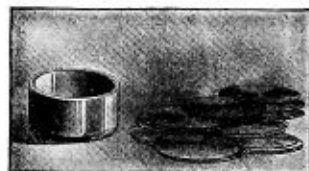
Valve Springs for Ford

Ford Valve Springs made of high grade crucible steel wire oil-tempered.

Each.....\$0.05
Dozen, D.P. \$0.80



Ford Valve Stem Adjuster



The adjusters are carefully made from the best materials. The shells are carbonized and hardened to insure a good wearing surface. Discs of proper size and thickness are provided for close adjustment. A set consists of 8 shells and approximately 48 discs. Packed in neat box.

Price, per set.....\$0.50
Dozen Sets, D.P. \$4.44

Ford Spring Shackle

With Integral Lubricator

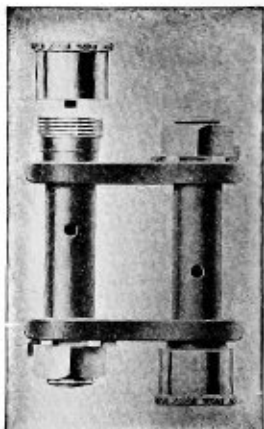
In the spring bolt lubrication grease has many advantages over oil.

Oil is difficult to get to all parts of the bearing surface and will not stay where needed. Grease, however, is forced by the action of the cup to all parts of the surface and stays there, not only insuring complete and permanent lubrication, but by forming a dust-proof collar at the ends of the spring eyes, prevents wear by keeping out grit.

All bolts are carefully heat-treated to give the maximum amount of wear.

Shackle is furnished absolutely complete, ready to install in the car without the addition of nuts, cotter pin, or grease cups.

Please specify whether front or rear shackle is wanted when ordering.



STYLE AND LIST PRICES

Number	Location	Brass Cap	Nickel Plated Cap
347	Front	\$1.50	\$1.60
	Each, D.P.	\$2.22	D.P. \$2.45
348	Rear	1.50	1.60
	Each, D.P.	\$2.22	D.P. \$2.45

STEERING WHEELS, HORNS, ETC.

Steering Wheels

17" Tilting Steering Wheel for Ford Cars



Stationary Wheel

There is a tremendous demand for a larger Steering Wheel than regularly furnished with the Ford car. The "Gemco" Stationary 17-Inch Steering Wheel has been on the market for some time and has been a very popular seller. There has now been added to this line at the demand of the trade a 17-Inch Tilting Steering Wheel as per the accompanying illustration. These larger wheels give greater leverage and, therefore, make steering very much easier. The spiders are properly machined to fit the Standard Ford Steering Column.

The 17-Inch Steering Wheel for Ford cars has created a great deal of interest and attention among Ford owners.
 Gemco Steering Wheel, stationary, plain rim, each.....\$3.60
 Each...D.P. \$5.35
 Gemco Steering Wheel, corrugated rim, each.....4.50
 Each...D.P. \$6.66
 Gemco Steering Wheel, tilting, plain rim, each.....4.50
 Each...D.P. \$6.66
 Gemco Steering Wheel, tilting, corrugated rim, each.....5.50
 Each...D.P. \$8.15

Pedal Pads

Positively prevents feet from slipping off pedals. Imparts a new sense of security to driver.

No vibration. A cushion 1/2-in. thick of new live rubber. They stop the jar.

Real foot comfort. The soles of your feet will not burn from holding out clutch and applying brakes on long grades, or in driving through congested traffic.

Stop trying to wear out your pedals with shoe leather. It's expensive.

Mason-Allen Pedal Pads for Ford, per set.....\$1.50
 Per set...D.P. \$1.67

Robe and Foot Rail



No. 5218. Square design. Extreme length, 30 1/2 inches; bar, 2 1/2 inches; bling, 1/4 x 2 1/4 inches; center to center of screw holes, 1 1/2 inches; weight, about 1 1/2 pounds. Ten robe rails packed in a corrugated board box.
 No. 5218 Robe Rail, brass rail and black ends, each.....\$0.75
 Each...D.P. \$1.00
 No. 5218 Robe Rail, nickel rail and black ends, each......75
 Each...D.P. \$1.00



No. 102 Folding Robe Rail, brass tube with black enameled handles, each.....\$1.25
 Each...D.P. \$1.45
 No. 1102 Folding Robe Rail, nickel tube with black enameled handles, each.....1.50
 Each...D.P. \$1.56

Foot Rail



No. 60 Foot Rail, brass with black ends, each.....\$1.75
 Each...D.P. \$1.89
 No. 61 Foot Rail, nickel with black ends, each.....1.75
 Each...D.P. \$2.00

Hand Klaxonet



The latest and best of the low priced hand horns. Made of Klaxon quality and carrying the permanent Klaxon guarantee. Supplied in all black, black and nickel and black and brass.

Each.....\$4.00
 Each...D.P. \$6.66 Dozen...D.P. \$74.60

Bair Top Holder

Model F Bair Bow Separating Tire Holders instantly adjustable to Ford Model T Touring Car. Only necessary to remove the old equipment and attach the Bair, an operation taking about five minutes. Finished in black enamel.



Per set of two \$2.50
 Per set...D.P. \$3.89

Cable Manifolds



Cable Manifolds for re-wiring Ford cars, complete as shown above.....\$1.50
 Each...D.P. \$1.45
 Extra Loom Assembly.....1.00
 Each...D.P. \$1.00

Timers



Milwaukee Ford Timers for 1913 to 1915, each.....\$2.00
 Each...D.P. \$3.00



FORD ACCESSORIES

SHOCK ABSORBERS AND WHEELS



Velvet Ford Shock Absorber

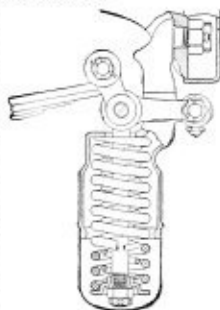
At last a Quality Shock Absorber for Ford cars at popular prices. A special Velvet Absorber embodying the well-known Velvet multiple coil principle. Velvet Absorbers are the oldest successful cushion type absorbers in the world, having been introduced in 1909, and steadily grown in popularity since that time. The multiple coil principle is exclusive with Velvets and fully protected by patents. Each Ford car that is equipped with Velvet multiple coil absorbers rides on eight sensitive, resilient little coils, thereby obtaining at least three times as much riding comfort as can possibly be received from absorbers containing but one big, stiff, heavy coil.

Per set of four.....\$15.00
Per set of four...D.P. \$24.95
Doz. sets, per set.....\$23.31

Temco Ford Shock Absorber

Temco Shock Absorbers represent the scientific application of a system of double spiral auxiliary springs—between the car and its body—to take and absorb the shock or jerk or jolt before it can reach the body and its occupants. The old pitching, jerking and jolting over the rough places is a thing of the past. The irritating vibration ceases. Temco Shock Absorbers give a gentle up and down buoyant swing on the roughest going. They take up all the sharp-jars of paved streets. Stiffness vanishes. They give the car great flexibility, making steering easy as on the smooth street; reduce friction between motor and running gear; preserve the alignment; save repair and upkeep expense; save tires; keep the car in better condition, thus adding to its sales value.

Per set of four.....\$15.00
Per set of four...D.P. \$24.95
Doz. sets, per set.....\$22.20



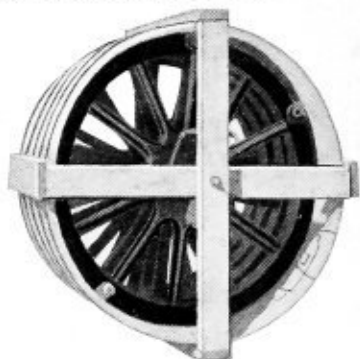
Sager Ford Shock Absorber

There are many thousands of Ford owners who have deferred buying Shock Absorbers until a strictly high grade device at a low price, made by a thoroughly responsible firm, was produced. We offer the Sager-Ford to this discriminating multitude. The following are some features of Sager-Ford which are unequalled: Drop forgings, heat treated; pressed steel shell, heavy gauge; dust proof; long helical springs, automatic in action; triple lock on dust-proof shell, impossible to lose; bearing surface for pin 100 per cent to 200 per cent more than others, no side motion; only five parts to each absorber; simplicity and lightness, yet greater strength and durability.

Per set of four.....\$12.00
Per set of four...D.P. \$15.00
Dozen sets, per set.....\$13.32



Ford Wheels with Demountable Rims



Shipping Weight, 145 Pounds

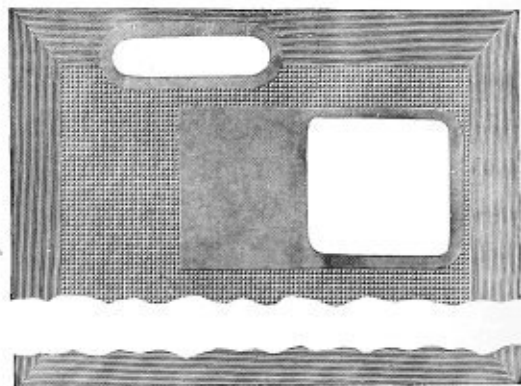
Ford Demountable Wheels 30x3½, solid clincher rim. The set consists of four complete finely finished wood wheels, with a fifth extra rim, lug wrench and bolts.

Price per set.....\$20.00
Per set...D.P. \$31.96

Firestone Ford Demountable Wheels 30x3½. Four complete wheels, with an extra rim and all attachments.

Per set.....\$25.00
Per set...D.P. \$41.63

Ford Rubber Mat

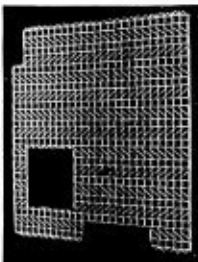


Rubber Mats for Ford Touring Car, each.....\$2.00
Each...D.P. \$1.89

Acme Ford Steel Mat

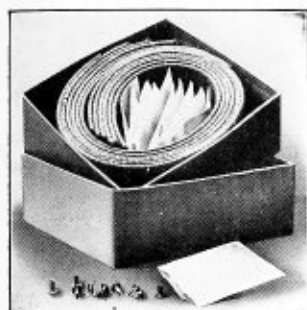
Acme Ford Steel Mats. Made of cold rolled steel. Will outwear a dozen rubber mats. Easily cleaned. Resist rust and not affected by oil. Attractive design and looks better than rubber.

Each.....\$3.00
Each...D.P. \$4.67



BRAKE LINING, FAN BELTS, ETC.

Fordoid Transmission Brake Lining



Every Ford car is equipped with a transmission brake made in three parts, and each part is lined with a strip of brake lining. Because this brake is located near the magneto the lining must not contain brass wire and it must contain practically no cotton or it cannot withstand the action of the oil and grease to which it is exposed.

Fordoid Transmission Brake Lining contains no wire and is composed almost wholly of long fibre Canadian asbestos. The process of manufacture is the same and it is thoroughly impregnated with the same secret friction compound used in making Thermoid Hydraulic Compressed Brake Lining.

Guaranteed to have more uniform gripping power and to outlast any other lining and not to be affected by the action of oil, grease, water, dirt, gasoline or heat.

Packed one dozen pieces (4 sets) to the box, complete with copper rivets.

Fordoid Brake Lining, complete with rivets, per set of three pieces.....\$1.50
Per set.....D.P. \$1.87

Thermoid Ford Wireless Brake Band Lining, 1 1/2 x 5/32, per foot......45
Per ft.....D.P. \$0.27 Per ft., 50 ft. lots.....D.P. \$0.25

G. Q. Ford Transmission Lining Set

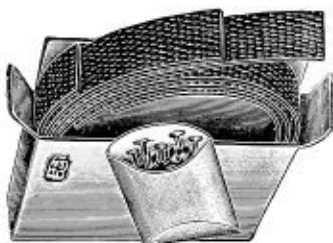
The lining is cut to the proper length; 3 lengths of 23 in. each, 1 1/2 in. wide and 5/32 in. thick. The set includes 34 split brass rivets.

The lining supplied is Gibson Quality Ford Wireless Brake Lining, which will not short-circuit the magneto, and is impervious to the action of grease, oil and dirt.

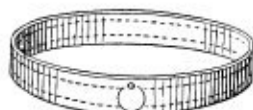
Each set packed in a heavy cardboard box.

Per set\$1.00
Per set.....D.P. \$1.00

Gibson Quality Ford Wireless Brake Band Lining, 1 1/2 x 5/32, per foot......40
Per ft.....D.P. \$0.20 Per ft., 50 ft. lots.....D.P. \$0.18



Ford Fan Belts



No. 1 Leather Ford Fan Belts, made of high grade leather, double stitched at splice, each.....\$0.50
Dozen.....D.P. \$4.88

Latigo Leather Belt



Latigo leather is really rawhide with the stretch tanned out. It contains no mineral tannage, but is tanned like leather was tanned in Mexico when Cortez landed there. It is impervious to the elements that usually destroy fan belts and should last indefinitely.

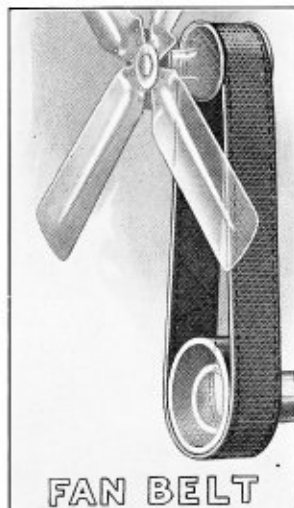
No. 6 Latigo Leather Ford Fan Belt, each.....\$0.50
Dozen.....D.P. \$6.10

Chrome Leather Fan Belt



No. 7 Chrome Leather Ford Fan Belt, each.....\$0.25
Dozen.....D.P. \$3.10

G. Q. Fan Belt



Gibson Quality Fordoid Fan Belt is constructed of six plies tightly woven special army duck of very great strength. Well treated with a special compound which increases the friction and makes the belt impervious to the action of oil, water and heat. All stretch is taken from the fabric before this treatment. Made endless, the splice being sewed above and below, eliminating all chance of opening. Sewed with specially treated thread. The material and construction are such that the Fordoid Fan Belt will give long and satisfactory service. We recommend and guarantee this belt.

No. 4, each.....\$0.60
Dozen.....D.P. \$4.89



FORD ACCESSORIES

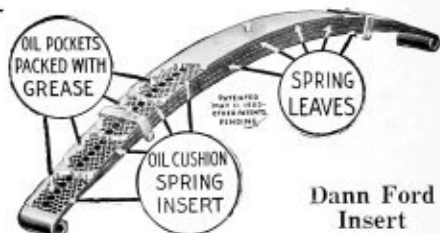
FORD TOOLS AND SPRING INSERTS



Ford Valve Grinder

No. 605 Ford Valve Grinder. To grind valves on a Ford car you must apply a quarter-circle power rapidly on the valve top. Two holes drilled in your valve top are engaged with the two pins on the grinder and ten minutes' work makes your engine smooth and quiet. Valve Grinder No. 605 is built for the car owner who wishes a neat, inexpensive tool guaranteed to do the work. Finest steel used in this tool, with wood top, 4½ inches high.

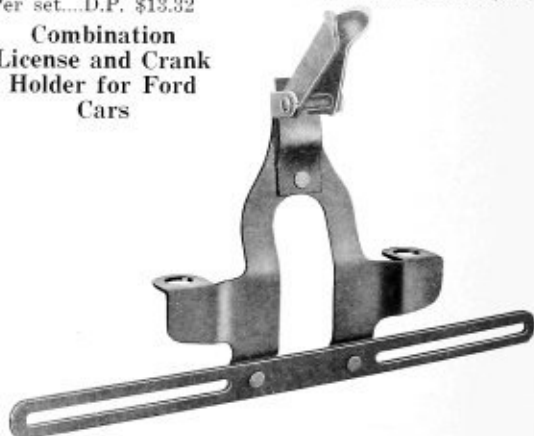
Price each.....\$0.50
Each...D.P. \$0.40



Dann Ford Insert

The Dann Oil Cushion Spring Insert is a thin perforated lubricant-packed strip of special metal designed to go between the spring leaves for all time and allows the spring leaves to slide smoothly and freely upon each other without friction from rust and dirt. Dann Ford Insert, per set.....\$8.00
Per set...D.P. \$13.32

Combination License and Crank Holder for Ford Cars



This Combination License and Crank Holder is made of pressed steel, black enameled, and serves the double purpose of holding the license and crank in place. The crank is kept in an upright position, clear of dirt and road obstructions, and is kept absolutely rigid, doing away entirely with any rattle, which is a source of annoyance when crank hangs loose or is supported by a strap. The danger of crank pins being broken by a crank becoming engaged when driving uphill and jarring over car tracks or rough roads is eliminated. It is also easily installed, not taking over five minutes, and requires no alteration to the car.

Each.....\$0.75
Dozen...D.P. \$8.00

Walden-Worcester No. 1620 Triple Socket Wrench

The double socket on one end makes a perfect offset handle. socket wrench, sizes are ½ in. and ¾ in. hex. The socket on the other end is ¾ in. hex, the double socket forms a T handle for using the single socket. Special Ford car, price.....\$0.50
Each...D.P. \$0.55

Hub Cap Wrench



Mossberg Hub Cap Wrench, each.....\$0.25
Each...D.P. \$0.17



Set No. 17 Heavy-Duty Socket Set for Ford Automobiles is composed of five sturdy steel bars eight inches over all, each having a socket on either end.

No. 17 Ford Double-End Socket Set packed in a canvas kit, ten different openings, each.....\$2.00
Per set...D.P. \$3.32

No. 15 A Mossberg Socket Wrench Set is for exclusive use on Ford cars and completely covers all adjustments that are to be found on these machines. In wood case containing



Mossberg ratchet socket wrench No. 350, tubular extension bar, universal joint, screw driver bit, spark plug socket, nine regular, mottled, thoroughly hardened pressed steel sockets, fitting standard sizes of screws, nuts and bolts; one special 19/32 oval socket for three crank shaft bearing bolts.

No. 15 A Mossberg Socket Wrench Set, packed in wood case, each.....\$5.00
Each...D.P. \$8.33

Walden Wrench Set



No. 5 Walden Set of Five Ford Service Wrenches, per set \$1.75
Per set...D.P. \$2.66



USEFUL INFORMATION

Engineering Data

Water weighs 62.4 pounds per cubic foot and 8.3 pounds per gallon.

There are 7.5 gallons in a cubic foot of water.

Gasoline has a specific gravity of .72, and consequently weighs 5.96 pounds per gallon. This applies to 76° gasoline.

A foot-pound represents the work required to raise a weight of one pound to a height of one foot. There are 33,000 foot-pounds to a horsepower.

A British Thermal Unit represents the amount of heat required to raise the temperature of one pound of water one degree Fahrenheit at or near 39° F. Its symbol is B. T. U.

There are 778 foot-pounds in a B. T. U.

On direct drive, with an efficient transmission and differential, about 88 per cent. of the power furnished by the motor should be delivered at the rear wheels.

Under the best condition about 75 per cent. of the indicated horsepower of the engine should be available for useful work.

To find the area of a circle, multiply the diameter by 7854, and to find the circumference of a circle, multiply the diameter by 3 14-16.

To find the cubic displacement of a motor, multiply the bore or diameter of cylinder by 7854 and multiply the result by the stroke and multiply this result by the number of cylinders, which gives the piston displacement.



USEFUL INFORMATION

Formula for Rate of Speed

To find the rate of speed of an automobile in miles per hour when the total distance covered and the total running time are known and the running time is given in minutes and seconds, reduce the seconds to fractional parts of a minute and proceed as follows:

Divide the time given in minutes and fractional parts thereof by 60, and divide the resulting quotient into the distance covered, and the answer gives the rate of speed in miles per hour.

Example: If a car travels 105.5 miles in 113 minutes and 30 seconds, what is the rate in miles per hour?

$$\begin{array}{r}
 60) 113.5 \\
 \hline
 1.89) 105.5 \text{ (55.8 miles per hour)} \\
 \underline{945} \\
 1100 \\
 \underline{945} \\
 1550 \\
 \underline{1512} \\
 38
 \end{array}$$

When the total distance and the total running time are known, and the time is given in seconds, proceed as follows:

Divide the distance covered into the running time given in seconds and divide the resulting quotient into 3,600 (which is the number of seconds in an hour) and the result gives the time in miles per hour.

Example: If a car travels 1.5 miles in 60 seconds, what is the rate in miles per hour?

$$\begin{array}{r}
 60) 3600 \text{ (60 miles per hour)} \\
 \hline
 360
 \end{array}$$

Speed Equivalents in American and French Measurements

The following table gives the speed of an automobile at the rate of one mile per hour:

1 mile per hour—	88 ft. per minute.
	1.46 ft. per second.
	27.8 metres per minute
	0.463 metre per second.
1 km. per hour—	0.624 miles per hour.
	54.9 ft. per minute.
	0.914 metre per second.

For greater speeds than this, multiply the figures shown by the rate in miles per hour, which gives the distance traveled in the period of time shown.



USEFUL INFORMATION

A Convenient Metric Conversion

- Inch x 25.4=Millimeters
Inch x 2.54=Centimeters
Yards ÷ 1.094=Meters
Miles ÷ .621=Kilometers
Millimeters x .03937=inches
Millimeters ÷ 25.4=inches
Centimeters x .3937=inches
Centimeters ÷ 2.54=inches
Meters=39.37 inches (Act of Congress)
Meters x 3.281=feet
Meters x 1.094=yards
Kilometers x .621=miles
Kilometers x 3280.7=feet
Kilograms x 2.2046=pounds
Kilograms x 35.3=ounces avoirdupois
Kilograms ÷ 1102.3=tons (2,000 pounds)
Kilo-watts x 1.34=horsepower
Watts ÷ 746=horsepower

United States Official Millimeters Conversion Table

Millimeters	Equivalent in Inches	Millimeters	Equivalent in Inches
1.....	0.03,937	9.....	0.35,433
2.....	0.07,874	10.....	0.39,370
3.....	0.11,811	20.....	0.78,740
4.....	0.15,748	25.....	0.98,425
5.....	0.19,685	30.....	1.18,110
6.....	0.23,622	50.....	1.96,850
7.....	0.27,559	75.....	2.95,275
8.....	0.31,496	100.....	3.93,700



USEFUL INFORMATION

A. L. A. M. Standard Horse-power Table

FORMULA—Bore of cylinder squared, multiplied by number of cylinders, divide by 2.5. The stroke is not taken into consideration, as the A. L. A. M. table is based on Piston speeds of 1000 feet per minute.

Inches	One Cylinder	Two Cylinder	Four Cylinder	Six Cylinder	Eight Cylinder	Twelve Cylinder
2 $\frac{1}{8}$	2 $\frac{1}{8}$	5	10	15	20	30
2 $\frac{1}{4}$	2 $\frac{1}{4}$	5 $\frac{1}{2}$	11	16 $\frac{1}{2}$	22	33
2 $\frac{1}{2}$	3	6	12 1-10	18 $\frac{1}{2}$	24 $\frac{1}{2}$	36 $\frac{1}{2}$
2 $\frac{3}{4}$	3 $\frac{3}{8}$	6 $\frac{3}{8}$	13 $\frac{1}{2}$	19 $\frac{1}{2}$	26 $\frac{1}{2}$	39 $\frac{1}{2}$
3	3 $\frac{1}{2}$	7 $\frac{1}{2}$	14 $\frac{1}{2}$	21 $\frac{1}{2}$	28 $\frac{1}{2}$	43 $\frac{1}{2}$
3 $\frac{1}{8}$	3 $\frac{7}{8}$	7 $\frac{7}{8}$	15 $\frac{1}{2}$	23 $\frac{1}{2}$	31 $\frac{1}{2}$	46 $\frac{1}{2}$
3 $\frac{1}{4}$	4 $\frac{1}{4}$	8 $\frac{1}{4}$	16 9-10	25 $\frac{1}{2}$	33 $\frac{1}{2}$	50 $\frac{1}{2}$
3 $\frac{3}{8}$	4 $\frac{3}{8}$	9 $\frac{3}{8}$	18 $\frac{1}{2}$	27 $\frac{1}{2}$	36 $\frac{1}{2}$	54 $\frac{1}{2}$
3 $\frac{1}{2}$	4 $\frac{1}{2}$	9 $\frac{1}{2}$	19 $\frac{1}{2}$	29 $\frac{1}{2}$	39 $\frac{1}{2}$	58 $\frac{1}{2}$
3 $\frac{3}{4}$	5 $\frac{1}{4}$	10 $\frac{1}{4}$	20 $\frac{1}{2}$	31 $\frac{1}{2}$	40 $\frac{1}{2}$	63 $\frac{1}{2}$
3 $\frac{7}{8}$	5 $\frac{3}{8}$	11 $\frac{1}{8}$	22 $\frac{1}{2}$	33 $\frac{3}{8}$	45	67 $\frac{1}{2}$
4	6	12	24	36 $\frac{3}{8}$	48	72 $\frac{1}{2}$
4 $\frac{1}{8}$	6 $\frac{1}{8}$	12 $\frac{1}{8}$	25 $\frac{1}{8}$	38 $\frac{1}{8}$	51 $\frac{1}{8}$	76 $\frac{1}{8}$
4 $\frac{1}{4}$	6 $\frac{1}{4}$	13 $\frac{1}{4}$	27 $\frac{1}{4}$	40 9-10	54 $\frac{1}{4}$	81 $\frac{1}{4}$
4 $\frac{1}{2}$	7 $\frac{1}{2}$	14 $\frac{1}{2}$	28 9-10	43 $\frac{1}{2}$	57 $\frac{1}{2}$	87 $\frac{1}{2}$
4 $\frac{3}{8}$	7 $\frac{3}{8}$	15 $\frac{3}{8}$	30 $\frac{3}{8}$	45 $\frac{3}{8}$	61 $\frac{3}{8}$	91 $\frac{3}{8}$
4 $\frac{1}{2}$	8 1-10	16 $\frac{1}{2}$	32 $\frac{1}{2}$	48 $\frac{1}{2}$	64 $\frac{1}{2}$	97 $\frac{1}{2}$
4 $\frac{3}{4}$	8 $\frac{3}{4}$	17 $\frac{3}{4}$	34 $\frac{3}{4}$	51 $\frac{3}{4}$	68 $\frac{3}{4}$	102 $\frac{3}{4}$
4 $\frac{7}{8}$	9	18	36 1-10	54 1-10	72 $\frac{1}{8}$	108 $\frac{1}{8}$
4 $\frac{7}{8}$	9 $\frac{1}{2}$	19	38	57	76	114
5	10	20	40	60	80	120
5 $\frac{1}{8}$	10 $\frac{1}{8}$	21	42	63	84	126
5 $\frac{1}{4}$	11	22	44 1-10	66 $\frac{1}{2}$	88 $\frac{1}{2}$	132 $\frac{1}{2}$
5 $\frac{1}{8}$	11 $\frac{1}{8}$	23	46	69 1-10	92	138 $\frac{1}{8}$
5 $\frac{1}{2}$	12 1-10	24 $\frac{1}{2}$	48 $\frac{1}{2}$	72 $\frac{1}{2}$	96 $\frac{1}{2}$	145 $\frac{1}{2}$
5 $\frac{3}{8}$	12 $\frac{3}{8}$	25 $\frac{3}{8}$	50 $\frac{3}{8}$	75 $\frac{3}{8}$	101 $\frac{3}{8}$	151 $\frac{3}{8}$
5 $\frac{1}{2}$	13 $\frac{1}{2}$	26 $\frac{1}{2}$	53	79 $\frac{1}{2}$	106	159
5 $\frac{3}{4}$	13 $\frac{3}{4}$	27 $\frac{3}{4}$	55 $\frac{3}{4}$	82 9-10	110 $\frac{3}{4}$	165 $\frac{3}{4}$
6	14 $\frac{1}{2}$	28 $\frac{1}{2}$	57 $\frac{1}{2}$	86 $\frac{1}{2}$	115 $\frac{1}{2}$	172 $\frac{1}{2}$

Description of Threads on U. S. Standard and S. A. E. Sizes

U. S. STANDARD			S. A. E. STANDARD		
Bolt Size	Threads per inch	Drill Size for Tapping	Bolt Size	Threads per inch	Drill Size for Tapping
$\frac{1}{8}$	20	.185	$\frac{1}{8}$	32	$\frac{3}{32}$
$\frac{1}{16}$	18	.240	$\frac{1}{4}$	28	$\frac{3}{32}$
$\frac{3}{16}$	16	.294	$\frac{3}{8}$	24	17/64
$\frac{1}{2}$	14	.344	$\frac{1}{2}$	24	21/64
$\frac{5}{8}$	13	.400	$\frac{3}{4}$	20	$\frac{1}{8}$
$\frac{7}{8}$	12	.454	$\frac{1}{2}$	20	29/64
$\frac{1}{2}$	11	.507	$\frac{1}{2}$	18	$\frac{1}{8}$
$\frac{3}{4}$	10	.620	$\frac{3}{4}$	18	$\frac{1}{8}$
$\frac{1}{2}$	9	.731	$\frac{1}{2}$	16	39/64
1	8	.837	$\frac{1}{2}$	16	43/64
$1\frac{1}{8}$	7	.940	$\frac{3}{4}$	14	25/32
$1\frac{1}{4}$	7	1.065	1	14	59/64



USEFUL INFORMATION

Hints on the Care of Storage Batteries

If a few simple rules are followed in the care of Storage Batteries, little or no trouble will be encountered in their use.

The battery should be inspected once a week in summer and once every two weeks in winter to ascertain the level of the electrolyte, which is lowered by evaporation. The electrolyte should cover the plates, and if such is not the case, **pure distilled or rain water** (ordinary hydrant or pump water will not do) must be added to bring the solution up to the proper level.

Addition of Acid

Acid should only be added to replace spilled solution and in the proportion of one part Chemically Pure (not merely commercially pure) sulphuric acid and three parts of pure distilled water at a hydrometer reading of 1300 at 70° Fahrenheit. For every three degrees above 70 the gravity should be one point lower; for every three degrees below 70 the gravity should be one point higher.

**ALWAYS ADD THE WATER TO THE ACID
—AND NOT THE ACID TO THE WATER**

Testing of Storage Batteries

For this purpose a Battery Hydrometer should be used. Fill the instrument with the liquid and the following reading shows condition of the batteries.

If battery fully charged reads 1250 on hydrometer, then the various readings would indicate battery strength of the percentage shown below:

1250 indicates	100 per cent.	1175 indicates	40 per cent.
1225 indicates	80 per cent.	1150 indicates	20 per cent.
1200 indicates	60 per cent.	1125 exhausted	00 per cent.

If battery is completely discharged, it should be taken off the car and recharged. The most satisfactory apparatus for this purpose is a Motor Generator Set or Rectifier, which is shown in a section of this catalogue.

Charging of Storage Batteries

In the charging of storage batteries, if the operator should be puzzled in determining the positive and negative of the charging wire, a simple test is as follows:

Draw three-fourths tumblerful of electrolyte from the battery. Attach a strip of lead to each terminal of the charging wire and place both strips in the solution. The current should be withheld, and in about three minutes the strips of lead examined. The one which is brown is attached to the positive side of the charging source and obviously the other side to the negative.



GENERAL INFORMATION

Hints on Use and Care of Dry Cells

It was predicted that with the advent of magnetos and starting and lighting systems on automobiles, the use of Dry Cells would be diminished, but instead there is a constant increase in their sale, due to the universal use in which they are employed.

They contain the maximum amount of power for the minimum amount of weight, but care must be given them or best results cannot be secured.

Before Gibson Quality Dry Cells are shipped from the factory, they are aged and tested for ten days. If any manufacturing errors have been made, such as torn paper lining or broken connections, they will show up in considerably less time, and such cells are discarded, so we therefore know that Gibson Quality Cells are right when shipped from the factory.

Storage of Dry Cells

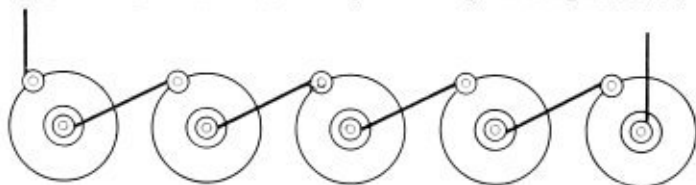
Do not purchase more Dry Cells than you can sell in a period of sixty days. Of course, they will keep much longer than this but while we use the best material and workmanship, a chemical action takes place within the cell that causes it to deteriorate if kept in storage for an indefinite period.

The temperature of the storage is very important. They should be kept in a cool, dry place in an upright position. High temperature will cause dry cells to deteriorate faster than low temperature.

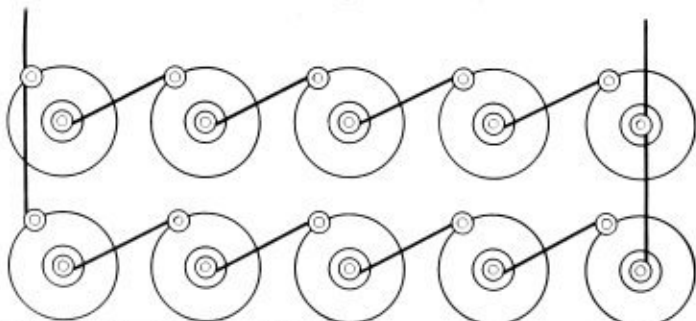
In winter, dry cells exposed to low temperature may show very low current readings. This does not affect the quality of the cell, even though it has been exposed to temperature below freezing point, as after being gradually thawed out they will register up to the original state and will give the same results in service as if they had not been frozen.

Connection of Dry Cells

The general way of connecting Dry Cells is in series, as shown in illustration, that is, by connecting the positive of one cell to the negative of another. Connecting in series increases the voltage in proportion to the number of cells. The voltage of Gibson Quality Dry Cells is $1\frac{1}{2}$ volts, therefore five cells connected in series would give a voltage reading of $7\frac{1}{2}$ volts, the ampere reading not being increased.



Where the ampere drain is high and long life is desired, it can be obtained by series multiple connection. However, in using series multiple connections, always use multiples of the original number of batteries connected in series. For instance, if the original equipment required five dry cells connected in series, to connect in multiple series, ten dry cells, fifteen dry cells and so on must be used. We give below an illustration of dry cells connected in multiple series.



In purchasing Dry Cells, see that the ampere reading of each cell does not vary greatly, and never connect new cells with those that have nearly run down, as the amperage of the new cell will be brought down to that of the old cell.

INDEX—Continued

318

	PAGE
Drip Pan, Dover	219
Dry Cells, Columbia	223
Dry Cells, Gibson Quality	223
Dust Cap	96
Dusters	194
Dye, Lining	294
E	
Eclair Connection	98
Economizer, Ford	201
Economizer, Soap	219
Edi-Swan Lamp Sockets	129
Edi-Swan Plug Extensions	129
Electric Adapters	129
Electric Drills	273
Electric Grinders	273
Electric Hand Lamp	117
Electric Horns	169
Electric Motors	277, 279
Electric Lamps, Ford	298
Electric Searchlight	110
Electric Soldering Iron	272
Electric Spotlight	113
Electric Tail Lamp	113
Electric Wire Connectors	31, 32
Electric Wire Sockets	32
Emblems, Radiator	135, 137
Emergency Mud Hooks	109
Enamels	261
Engine Cleaner	253
Engine Driven Pump, Ford	292
Engine Driven Pump, Manzell	102
Engine Enamels	261
Eureka Valve Grinding Compound	291
Eveready Pocket Meters	36
Eveready Storage Batteries	26, 27
Eveready Tungsten Flashlight	118
Expansion Reamers	260
Extinguishers, Fire, Pyrene	21
Extractor, Cotten Pin	229
Eye Protectors	138, 139
F	
Fabric	86
Falcon Tires	65, 73
Falcon Tubes	74, 75
Fan Belts, Ford	269
Fasteners, Curtain	165
Fasteners, Hood	164
Feather Dusters	194
Fedders Radiator, Ford	302
Felt, Blue	212
Felt Washers	212
Fender Brace, Ford	296
Fender Mirror	167
Fiber Rod	188
Fiber, Sheet	188
Fiber Tubing	188
Files	254
Fire Extinguishers	21
Fire Pot	257
Fittings, Pipe	49
Flap, Firestone	80
Flashlights	118, 120
Flashlight Battery	120
Flexible Horn Tubing	109
Flexible Lamp Connection	128
Flexible Steel Lined Gasoline Hose	130
Flexible Metallic Conduit	31
Flexible Rules	244
Flexible Steel Tubing	97
Flexible Tubing, Hot Air	45
Floor Switches	35
Flush Push Button Switch	34
Fluxes	261
Folding Lamp	122
Folding Seats	372
Folding Buckets and Baskets	142
Food Jars and Bottles	143, 144
Foot Accelerator, Ford	201
Foot Rails	185
Foot Rail, Ford	207
Foot Pumps	100
Footman Loops	164
Foot Warmers	157
Ford Accessory	290, 310
Ford Bumper, Buckeye	156
Ford Pump, Maye	104
Ford Starters, Genemotor	296
Ford Tire Holders	296
Ford Tools	310
Fordoid Transmission Brake Lining	269
Forge	255, 271
Freeze-Meter	28
French Reflectors	126
Friction Caliper	246
Friction Wrench Set	258
Funels	217
Furniture Polish	210, 217
Fuses	61, 279
Fuse Blocks	279
Fuse Plugs	279
G	
Garage Lamps	123
Garage Press, Weaver	293
Gas Bag	128

	PAGE
Gaskets	189, 191
Gaskets, Assortment	190, 191
Gaskets, Spark Plug	117
Gas Lamps	298
Gas Lamps, Ford	298
Gas Searchlights	110
Gas Tanks, Prest-O-Lite	124
Gas Tank Boxes and Covers	124
Gas Tank Bands, Prest-O-Lite	124
Gas Tank Key	125
Gas Tubing, Bradoid	125
Gas Tubing Cock	128
Gas Tubing Nipples	128
Gasoline Economizer, Ford	201
Gasoline Gauge	36
Gasoline Gauge, Ford	303
Gasoline Hose, Flex Steel Lined	130
Gasoline Pipe Fitting	128
Gasoline Reserve Valve, Ford	201
Gasoline Saver, Ford	201
Gasoline Strainer	39, 43
Gasoline System, Stewart	130
Gasoline Tanks	217
Gauge, Center, Starrett	244
Gauges, Oil and Gasoline	36
Gauges, Ford Oil	205
Gauge Lamps	122
Gauge, Pump	89
Gauge, Tire	89
Generator	296
Generator Set	274, 276
Genco Cut-out	201
Genco Steering Wheels	43
Genco Valve Spring Release	228
Gem Soldering Set	211
Gibson Quality Brake Band Lining	186
Gibson Quality Dry Cells	23
Gibson Quality Fan Belt, Ford	209
Gibson Quality Ford Transmission	309
Brake Lining	309
Gibson Quality Gasket Assortments	191
Gibson Quality Grease	199
Gibson Quality Ignition Cable	39
Gibson Quality Lamp Cord	39
Gibson Quality Master Vibrator	295
Gibson Quality Patches	77
Gibson Quality Metal Polish	196
Gibson Quality Pumps	100
Gibson Quality Oils	138, 139
Gibson Quality Radiator Hose	47
Gibson Quality Seat Covers	162, 163
Gibson Quality Spark Plug	8, 9
Gibson Quality Tire Covers	192
Gil-Bo Adapters	192
Glad Rags	197
Glass Cutter	252
Glasses, Lamp	116, 128
Goggles	128, 139
Golden Star Body Polish	187
Gordon Lamp Covers	166
Grade Indicator	28
Graph-Coat	200
Grease, Muffler Cut-outs	179
Grease Caps	208
Greases	190, 203
Greases, Gibson Quality	199
Gridley	203
Grease Guns	205
Green Label Tubes	165
Grinder, Cylinder	281
Grinders, Electric	273
Grinders, Niagara	256
Grinding Machines	287
Grinding Set	228
Grinding Tools, Valve	294
Gum, Repair, Adamson	81
H	
Hack Saw Blades	247
Hack Saw Frames	294
Hammers	295
Hammer Molds	238
Hand Drill	251
Hand Lamps	117
Handles, Hood	164
Hand Reamers	260
Hand Soap	195
Hangers, Shaft	288
Hardies, Blacksmith	288
Harness and Switch, Ford	298
Headlights	110
Headlight Dimmers	110
Head-A-Cut	88
Heaters, Clark	157
Heel Plates	180
Heinz Box Coils	50
Heinz Kick-off Switches	34
Hexagon Cap Screws	222
Hexagon Nuts	222, 224
High Pressure Tubing	97
Hodgman Coils	166
Holders, Oil Can	214
Hood Fasteners	164
Hood Handles	164
Hooks, Belt	192
Hook-on Boots	77
Hook Rules, Starrett	214

	PAGE
Horns, Bulb	108
Horns, Chime	131
Horns, Klaxon	106, 107
Horn Cable Protectors, Samson	35
Horn and Cut-out Pedals	179, 180
Horn Reeds, Motorcycle	109
Horn Tubing	178
Horn Valves	151
Hose	130
Hose, Air	97
Hose Bands, Esco	97
Hose Clamps	47
Hose, Gibson Quality Radiator	47
Hose, Radiator, Ford	304
Hot Air Flexible Tubing	45
Hub Caps, Ford	305
Hub Cap Wrench, Ford	310
Hub Odometers	147
Husk Horn Valves	178
Hydrometers	28
Hydrometer Syringes	28
I	
Ignition Cable	29, 30, 31
Ignition Systems, Ford	200
Imperial Prime-Urs	46
Imperial Pumps	191
Improved Belt Hooks	192
Impulse Pumps, Brown	105
Indicators	37
Indicators, Grade	28
Inflator, Tire	165
Inland Pumps	101
Inlet Hose, Ford	304
Iron Bars	201
Iron Cement, Wonder-Worker	201
Inside Patches	78
Instruments, Switchboard	280
Insulated Staples	51
Interlock Reliners	80
J	
Jacks	170, 173
Jansen Pumps	191
Jericho Horns	131
Jet-Lac	201
Joint Boots	106
Jubilee Horns	131
Jumbo Husk Chime Horn	131
K	
Kant-Rio Inside Patches	78
Kant-Rio Reliners	80
K-C Safety Lock Patches	79
Kellogg Engine Driven Pumps	202
Kellogg Pumps	101
Keno Connections	98
Keys, Prest-O-Lite	125
Keys, Whitney	123
Kick-off Switches	34
Kick Switches	33
King's Road Guide	135
Kingston Box Coils	50
Kits, Tool	262, 263
Klaxon Horns	106, 109
Klaxonet Horns, Ford	307
Kawthorn's Spring Spreader	177
Knurled Nuts, Romort	90
L	
Lace-on Boots	77
Lacquer	204
Laminated Shim Metal	213
Lamps	110, 123
Lamp Accessories	127
Lamp Brackets	127
Lamp Bulbs	115
Lamp Burners, Gibson Quality	126
Lamp Connections	128
Lamp Cord	30
Lamp Covers	106
Lamps, Ford	128
Lamp Glasses	110
Lamp Outfits, Ford	129
Lamp Sockets, Edi-Swan	290
Lamp Wicks	127
Lapped End Reliners, Gibson Quality	80
Lathes	282, 286
Lathe Tool Set	286
Lead Hammers	229
Lead Belting	192
Leather Fan Belts, Ford	309
Leathers, Pump	97
Leak-Proof Piston Rings	217
Levels, Pocket	217
License Brackets	64
License and Crank Holders, Ford	310
Lighting Outfits, Ford	299
Lighting Switches, Connecticut	33
Lighting Switches, Ford, Gibson Quality	290
Lifters, Vileck Valve	228
Lobe Pumps	255
Locks	140, 141
Lock Cotten Pins	242

	PAGE
Lock Washers	223
Lock Washers, Assortment	220
Loops, Footman	164
Lubricators, Ford	303
Lunch Kits	143
M	
Machine Screws	224
Machine Tools	282
Magnets	287
Magnetos, Ford	300
Magnet Covers	353
Magneto Parts	52
Magneto Switch, J. & B.	51
Magnetizer	272
Mangle Mirrors	126
Manifold, Ford Cable	307
Manzel Engine Driven Pumps	102
Manzel Engine Driven Pumps, Ford	302
Maps, Road	135
Mason-Allen Pads	180
Master Vibrators	285
Mats Body Polish	187
Mats Rubber, Ford	180
Matting, Rubber, Ford	308
Mayo Ford Pumps	104
Mayo Spark Plug Pumps	104
Mayo Valve Cap Pump	104
Maxim Horns	109
Mazda Bulbs	120
Mazda Lamps	115
Measures	215, 218
Meters, Eveready Pocket	36
Metal Gasoline Hose	130
Metal Polish	196, 197
Metal Tubing, Flexible	45
Metallic Flexible Conduit	31
Mica Powder	85
Michelin Cement	84
Michelin Mastic	84
Micrometers	245
Milling Machines	285
Milwaukee Timers	51
Miniature Bulbs	115
Mirrors	167
Mirror Brackets	167
Miners' Flashlights	113
Mirrors, Mangle	126
Mold, Soft Metal Hammer	229
Monkey Wrenches	237
Mossberg Socket Wrenches	181
Mossberg Socket Wrenches	242
Motors, Electric	277, 279
Motor Generator Sets	274, 276
Motor Eye	46
Motor Stands	281
Motor Washers	253
Motometers, Boyce	46
Motorcycle Horns	108
Motorcycle Horn Reeds	108
Motorcycle Speedometers	148
Molding	185
Mound Carbon Scrapers	212
Mud Hooks	160
Multiple Battery, Columbia	23
N	
Nail Sets	247
Narco Products	81
Needle Valves	269
New Era Shock Absorbers	155
New Ormond Clocks	132
Neverout License Brackets	64
Niagara Grinders	256
Nickel Polish	197
Nipples	246
Nipples, Gas Line	128
No-Cement Patches	82
Non-Fluent Oil	200
Non-Gran Bearing Bronze	213
Norwood Vehicle Casters	172
Nozzle, Remort Air	90
Nuts	222, 224
Nuts, Assortments	220
Nuts, Remort Knurled	90
O	
Odometers	146, 147
Offset Socket Wrench	243
Oil and Gasoline Gauge	36
Oiling	263
Oils	198, 203
Oils, Gibson Quality	198, 199
Oil Can Holders	214
Oil Cans	214
Oil Cans, Storage	218
Oil Cups	208, 209
Oil Gasoline Kit	217
Oil Gauge, Ford	303
Oil Guns	205
Oil Lamps, Ford	298
Oil Measures	215
Oil Pumps	206
Oil Side and Tail Lamps	111
Oil Tempered Springs	192
Outlet Hose, Ford	304
Oxygen Carbon Remover	292

	PAGE
Pads, Pedal	180
Paddocks	140, 141, 142
Packard Ignition Cable	29
Packing	188
Pails, Garage	217
Paper Car Covers	157
Parabola Reflectors	113
Pasha Spark Plugs	16
Patches, Blowout	77
Patches, Firestone	73
Pedals	179, 180
Pedal Pads	180
Pedal Pads, Ford	307
Peerless Assortment	157
Perfection Buggy Washer	185
Perfect Handle Wrenches	240
Pet Cocks	210
Phinney-Walker Clocks	133
Pioneer Clutch and Brake Com-	204
pound	49
Pipe Fittings	205
Pioneer Grease Gun	204
Pioneer Rim and Gasket Shellac	221
Pins, Cotter	221
Piston Flashlight	120
Piston Rings	257
Pitner Pumps	100
Pitner Pump Connection	98
Plates, Heel	180
Plating Compound, Silver	201
Platinum Contacts	52, 60
Pliers	230
Pliers, Cotter Pin	229
Plug Cut-out	279
Plug Extensions	129
Plugs, Fuse	279
Plugs, Spark, A. C.	14
Plugs, Spark, Cleo	14
Plugs, Spark, Bethlehem	15
Plugs, Spark, Bosch	11
Plugs, Spark, Herz, Bongie-Mer-	15
cedes	10
Plugs, Spark, Champion	10
Plugs, Spark, Gibson Quality	8, 9
Plugs, Spark, Kingston	13
Plugs, Spark, Mosler	16
Plugs, Spark, No Name	16
Plugs, Spark, Pasha	16
Plugs, Spark, Rajah	11
Plugs, Spark, Red Head	12
Plugs, Spark, Speedway	13
Plugs, Spark, Soot-proof	13
Plugs, Spark, Splitdorf	11
Plugs, Spark, Porcelain	17, 18
Pocket Borer	250
Pocket Level	247
Pocket Meters	36
Pocket Screw Driver	247
Polish	196, 197
Pots, Fire	257
Pop Valve, Safety	209
Porcelains, Spark Plug	17, 18
Post Drills	270
Powder, Mite	83
Prest-O-Lite Accessories	124
Prest-O-Carbon Remover	212
Pressure Gauge, Tire	89
Prick Punch	247
Prest-O-Lite Tanks	124
Prest-O-Tire Tubes	105
Primers	46
Priming Cups	210
Protector, Samson Cable Horn	35
Protectors, Sleeve and Cuff	195
Plug Taps	259
Plug Taps, Spark	259
Pulleys	179
Pulleys, Shaft	288
Puller, Wheel	225
Pump Connection	98
Pump Gauge	89
Pump Leathers	97
Pump Tubing	97
Pumps, Foot	100
Pumps, Ford	302
Pumps, Oil and Air Dash	206
Pump, Water Circulating	249
Punches	249
Push Button Switches	35
Pyramid Rubber Matting	180
Pyrene Fire Extinguishers	21
Pyro Alcohol	206
Q	
Quick Repair Links	169
R	
Radiators, Ford	302
Radiator Cap and Thermometer,	303
Ford	

	PAGE
Radiator Cement, Blue Ribbon	206
Radiator Compounds	206
Radiator Emblems	136, 137
Radiator Hose, Ford	304
Radiator Hose, Gibson Quality	47
Radiator Support, Ford	302
Radiator Thermometer	46
Rails, Robe	185
Rain Coats	169
Radi-No-Leak	206
Radius Rod, Ford	305
Radius Rod Ball Socket, Ford	306
Rajah Spark Plugs	11
Rajah Terminals	29
Ratchet Wrench	235
Ratchet Wrench, Starrett	244
Rayfield Carburetors	4, 45
Rayfield Carburetor, Ford	304
Rayfield Carburetor Parts	45
Reamers	269
Rebound Straps	153
Rectifier	272
Red Fiber Tubing Rod and Sheet	188
Red Head Spark Plugs	12
Red-Line Patches	78
Resinching Valve	201
Resins, Horn	169
Reflectors, French	126
Reflectors, Parabola	113
Refrigerators	151
Refrigerator Basket	142
Regulating Valve, Prest-O-Lite	124
Reinlers	80
Repair Gum	81
Repair Links	169
Repair Material	81
Repair Tools, Tire	81
Repair Tool, Skid Chain	249
Reseating, Outfit	201
Reserve Valve, Ford	301
Revolving Tube Vulcanizers	289
Revolver Rubber	81
Rexo Horns	109
Rexo Steering Column Fixture	35
Rid-O-Skid Chains	168, 169
Rims, Ford	308
Rim Paint, Never-Rust	204
Rims, Stanwell	94
Rim Tools	181
Rim and Gasket Shellac	204
Rings, Piston	227
Rings, Assortment	212
Rivets, Copper	212
Riveting Hammer	253
Road Guides	135
Robe Rails	185
Robe Rail, Ford	307
Rods, Welding	291
Romort Air Nozzle	99
Romort Automatic Air Valve	99
Romort Pump Connection	99
Ronson Wrenches	241
Roughener Rubber	88
Rubber Boots	165
Rubber Bumpers	157
Rubber Cement	84
Rubber Goggles	139
Rubber Mat, Ford	308
Rubber Matting	180
Rubber Reviver	81
Rubber, Roughener	88
Rubber Steering Wheel Covers	63
Rudy Cut-out Valves	178
Rubber Tubing, Genemotor	125
Rules, Starrett	244
Running Board Tire Holders	160
S	
Safety Lock Patch	79
Saw Blades	247
Saw Frames	294
Scarborough's Road Guides	135
Schebler Carburetors	38, 39
Schebler Carburetor, Ford	304
Schebler Carburetor Parts	39, 40, 41
Schebler Gasoline Strainer	39
Screw Assortments	221
Screw Case	224
Screw Drivers	232, 233
Screw Drivers, Pocket	247
Screw Pitch Gauge	245
Screw Plates	258, 259
Sealtite	85
Security Blowout Holder	78
Security Tool Bag	248
Security Wind Shield Cleaner	63
Searchlights	110
Searchlight, Ford	298
Seat Covers, Gibson Quality	162, 163
Se-Ment-Oil	206
Set Screws	223
Set Screws, Assortment	220
Shackle Bolts, Spring	176
Shafting	288
Sheet Packing	188
Shellac	204

INDEX—Concluded

320

	PAGE
Shim Stock	213
Shock Absorbers	154, 155
Shock Absorbers, Ford	308
Shut-off Cocks	210
Side and Tail Lamps	111
Silver Plating Compound	201
Skinner Pumps	100
Skips, Chamois	194
Sledges	288
Sleeve and Cuff Protectors	195
Slide Calipers, Starrett	244
Slotted Rivets	212
Snaps	195
Soap	219
Soap Economizer	181
Socket Braces	129
Sockets, Edli-Swan Lamp	32
Sockets, Electric Wire	242
Socket Wrenches	310
Socket Wrenches, Ford	229
Soft Metal Hammer	211
Solder	188
Solder Paste	211
Soldering Coppers	211
Soldering Irons, Electric	272
Soldering Set, Gem	211
Solderless Compression Couplings, IS	49
Solid Punches	249
Sonoscope	225
Soot Proof Spark Plugs	13
Spanner Wrench	238
Spark Plugs, A. C.	14
Spark Plugs, Cadillac	15
Spark Plugs, Cicco	11
Spark Plugs, Bosch	11
Spark Plugs, Champion	10
Spark Plugs, Gibson Quality	8, 9
Spark Plugs, Herz, Bougie, Mercedes	13
Spark Plugs, Kingston	13
Spark Plugs, Mosler	16
Spark Plugs, No Name	16
Spark Plugs, Pasha	16
Spark Plugs, Radio	11
Spark Plugs, Red Head	12
Spark Plugs, Soot Proof	13
Spark Plugs, Speedway	13
Spark Plugs, Splittorf	11
Spark Plug Display Case, Bethlehem	15
Spark Plug Accessories	18
Spark Plug Gaskets	17
Spark Plug Porcelain	17, 18
Spark Plug Pump, Mayo	104
Spark Plug Brushes	18
Spark Plug Taps	239
Spark Plug Washers	17
Spark Plug Wrenches	12, 18
Speed Indicator	245
Speedometer	146, 147, 148
Speedometer Parts	149
Speller	211
Splittorf Coils	50
Splittorf Magneto	51
Splittorf Magneto, Ford	300
Splittorf Switch	34
Speedway Spark Plugs	13
Splittorf Spark Plugs	11
Sponges	194
Spot Light	112
Spring Bumpers	157
Spring Inserts, Ford	310
Spring Hood Straps	153
Spring Clips	177
Spring Links	176
Spring Ford Valve	305
Springs, Oil Tempered, Coil Wire	192
Spring Repairs	177
Spring Shackles	306
Spring Shackle Bolts	176
Spring Spreaders	177
Springs, Vulcan	172, 173, 174
Stanley Rules	248
Stanwood Rims	94
Starlets, Insulated	140
Starley Pumps	244
Starrett Tools	244
Starters, Generator	296
Steady Steerer, Ford	305
Steel Balls	183
Steel Bars	288
Steel Belt Lacing	192
Steel Lined Gasoline Hose	130
Steel Mat, Foot	308
Steel Tape, Starrett	244
Steel Tubing, Flexible	97
Steel Wire Railing	192
Steer Warnings	192
Steering Column Fixture, Rexo	35
Steering Wheels	367
Steering Wheels, Ford	367
Steering Wheel Covers	63
Stewart Pumps	103
Stewart Speedometer and Odometer	146, 147
Stewart Speedometer Parts	149
Stewart Vacuum Gasoline System	130
Storage Stand	172

	PAGE
Starting and Lighting Batteries	24, 25, 26, 27
Stillson Wrenches	240
Storage Batteries	24, 25, 26, 27
Stove Bolts	223
Straps	153
Stromberg Carburetor	42, 43
Stromberg Carburetor, Ford	304
Stromberg Carburetor Parts	42, 43
Sub-base Oilier, Ford	303
Support Brake Rod	306
Sure Grip Hose Clamps	47
Switches	33, 34, 35
Switches, Automatic Electric	272
Switch, Connecticut Lighting	33
Switch, J. & B. Magneto	51
Switches, Knife	279
Switchboard Instruments	280
Syringes, Hydrometer	28

T

	PAGE
Tail Lamps	111
Tail Lamps, Ford	228
Tale	83
Tanks, Air Compressor	268
Tanks, Gasoline	217
Tanks, Prest-O-Lite	124
Tank Bands, Prest-O-Lite	124
Tank Boxes and Covers	151
Tank Key	127
Taps, Taper and Plug	259
Tape, Wrench	244
Tape, Steel	244
Tape, Tire	83
Taper Pins	223
Taper Pin Assortment	220
Taper Pin Reamers	260
Taper Taps	259
Teisco Shock Absorbers	308
Tents, Nesom	192
Terminals, A. C. Clip and Q. D.	17
Terminals, Copper	19
Testers, Bulb and Battery	120
Thermos Bottles	143, 144
Thermoid Brake Band Lining	187
Thermometers	28
Thermometers, Ford	303
Thickness Gauge, Starrett	244
Thompson's Electric Hand Lamp	117
Thompson's Hose Clamps	47
Thread Calipers	246
Three-in-One Oil	207
Timers, Ford	307
Timers, Milwaukee	51
Tinners' Snips	249
Tires	65, 76
Tire Chains	168, 169
Tire Chain Repair Tool	249
Tire Covers	193
Tire Cut Filler	81
Tire-Loch	81
Tire Holders	158, 161
Tire Inflators	165
Tirenew	80
Tire Pressure Gauges	80
Tire Repair Tools	81
Tire Savers	172
Tire Tape	83
Tire Testing Pan	219
Tire Tools	181
Tire Trunks	152
Tire Tubes, Prest-O-Tire	165
Toys, Blacksmith	288
Toys, Blacksmith	288
Tools, Machine	287
Tools, Starrett	244, 246
Tool Bags	248
Tool Boxes	150, 151
Tool Kits	238, 262, 263
Tool Post Grinders	273
Tool Rolls	248
Tool Set Lathe	286
Tools, Tire	181
Tools, Valve	96
Top Dressing, Norwesco	204
Top Holders, Ford	307
Top Holders, Ford	307
Torches	257
Trays, Auto	253
Trouble Lamps	121, 123
Trunks	152
Trunk Boxes	151
Trunk Carriers	152
Trunk Straps	153
Truss Rods, Ford	305
Tube Extensions	129
Tube Vulcanizers	289
Tubing, Copper and Brass	125
Tubing, Flexible Steel	97
Tubing, Generator	125
Tubing, High Pressure	97
Tubing, Horn	109
Tubing, Pump	97
Tubular Flashlights	119
Turnbuckles	181
Twist Drills	261

U

	PAGE
Unions, Prest-O-Lite	125
Unisarker, Ford	300
Universal Joint Boots	166
U-Kan-Plate	201
Upolstering Dressing, Norwesco	204
Utility Socket Wrench	241
Utility Jr. Tire Inflator	105

V

	PAGE
Vacuum Bottles	143, 144
Vacuum Gasoline System, Stewart	130
Valves	96
Valve Base	96
Valve Insides	96
Valve Cap Pump, Mayo	104
Valve Grinder, Ford	310
Valve Grinding Compounds	207
Valve Grinding Tools	294
Valves, Horn and Cut-out	178, 179
Valve Lifter	228
Valve, Prest-O-Lite Regulating	124
Valve Remover	294
Valve Rescuer	260
Valve Sealing Tool	228
Valve Spring Release	228
Valve Spring, Ford	306
Valve Steams, Ford	306
Valve Stem Adjuster, Ford	306
Valve Tools	96
Vanguard Wind Shields	62
Varnishes	200
Velvet Shock Absorber, Ford	308
Vest Pocket Flashlight	118
Vibrators, Gibson Quality	285
Victor Gasket Assortment	190
Vises	255
Visor, Wind Shield	63
Volt Meters	37
Volt Meter, Switchboard	280
Vulcanizers	90, 93
Vulcanizing Cement	84
Vulcanizers	289

W

	PAGE
Warms, Steer	65
Wash Aprons	195
Washers, Acorn	98
Washers, Buggy	185
Washer Cutters	220
Washers, Felt	212
Washers, Motor	253
Washers, Spark Plug	17
Washers, Wrought Iron	223
Waste	165
Water Circulating Pumps	225
Water Hose	130
Weaver Auto Ambulance	173
Weaver Auto Twin Jack	173
Weaver Garage Press	293
Weed Chains	168, 169
Weed Chain Adjusters	168
Welding Outfits	290
Welding Rods	81
Wheel Covers, Steering	63
Wheel Guards, Grinding	287
Wheel Pullers	225
Wheels, Carborundum	209
Wheels, Ford	308
Wheel Puller, Ford	305
White-Way Silver Plating Compound	201
Whitney Keys	193
Whiz Hand Soap	193
Wicking, Asbestos	127
Wicks, Lamp	127
Wilcox Trunk Carrier	152
Williams Wrenches	239
Wind Shields	62
Wire	96
Wire Cable	179
Wire Electric Connectors	31, 32
Wire Gauge Drills	261
Wire Gauge	245
Wire Hose Clamps	47
Wire Solder	63
Wind Shield Cleaner, Security	63
Wind Shield Visor	63
Wire Railing	192
Wire Woven Asbestos Packing	188
Wood Jacketed Cans	218
Wood Dusters	194
Wrecking Trucks, Holmes	172
Wrenches	231, 236
Wrenches, Ford	310
Wrenches, Spark Plug	12, 18
Wrenches, Tap	259
Wrought Iron Washers	223

Y

	PAGE
Yankee Calipers	246
Yankee Pumps	101
Yale & Towne Hoists	236
Yale Padlocks	140, 141
Yokes, Clip	170

FALCON TIRES ARE SAFE TO BUY

CARNEGIE LIBRARY OF PITTSBURGH



3 1812 04075 0284

THE GIBSON COMPANY
INDIANAPOLIS